

ANGLO-EASTERN PLANTATIONS PLC

CARBON AND ENERGY DATA

2020

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ANGLO-EASTERN PLANTATIONS PLC

SECR COMPLIANT DIRECTORS STATEMENT

Anglo-Eastern Plantations Plc (AEP) recognises that our global operations have an environmental impact and we are committed to monitoring and reducing our emissions year-on-year. We are also aware of our reporting obligations under The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. As such, this year we have upgraded our energy and carbon reporting to meet these new requirements and increase the transparency with which we communicate about our environmental impact to our stakeholders.

2020 PERFORMANCE SUMMARY

AEP's total carbon emissions have more than doubled in 2020 (+106%). This is primarily due to significant shifts in land use emissions, explained by the lack of amortisation (see methodology below). There was a 92% increase in the area of land cleared in 2020 compared to 2019. All land cleared in 2020 was secondary regrowth or oil palm (e.g. clearing old oil palm nurseries).

Carbon sequestration does not face the same amortisation issues therefore the shift in land clearance is not balanced by any corresponding improvement in sequestration capacity. The sequestration capacity of oil palms varies by age, with old plants (28 years) and new plants (1 year) having similarly low sequestration capacity. Therefore, whilst much old oil palm was cleared in 2020, this was replaced with 1 year old plants who have not yet reached sequestering age.

Operational emissions have decreased by almost a third (31%) in 2020. This is driven by the reduction in POME treatment emissions, due to the switch from anaerobic lagoon to a new biogas plant at Tasik Mill. Over the course of 2020 fertiliser application has shifted based on recommendations from our agronomist. This has resulted in lower emissions due to fertiliser use, whilst ensuring that fresh fruit bunch (FFB) production remains high.

ENERGY AND CARBON ACTION

In the period covered by the report the Company has undertaken the following emissions and energy reduction initiatives:

Switching POME treatment to biogas plants

In Q1 2020 we began operation of our biogas plant at the Tasik Oil Mill. This resulted in all palm oil mill effluent (POME) being processed through this plant, reducing the need for anaerobic lagoons whilst simultaneously generating energy. This energy is partially used on site, and partially exported back to the grid.

We estimate that the operation of this biogas has resulted in the avoidance of **101,800 tCO₂e** in 2020. This is the fourth of our six mills to have this technology operational. We aim to continue the roll out of biogas plants to the remaining mills in coming years.

2020 RESULTS

Methodology

The methodology used to calculate the GHG emissions is in accordance with the requirements of the following standards:

- World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol (revised version)

- Defra's Environmental Reporting Guidelines: Including Streamlined Energy and Carbon Reporting requirements (March 2019).

Following an operational control approach to defining our organisational boundary, our calculated GHG emissions from business activities fall within the reporting period of 1st January 2020 to 31st December 2020 and using the comparable reporting period of January 2019 to December 2019 for comparison.

Note on agricultural emissions

Emissions from agricultural cultivation form the most significant part of our carbon footprint. As such we have assessed these emissions in line with the methodology development by the Roundtable for Sustainable Palm Oil (RSPO). Version 4 of the RSPO's PalmGHG application has been used to source relevant emission factors and provide a sense check of calculations.

We include emissions from agricultural cultivation on our own estates within our direct scope 1 and estimate these agricultural emissions from any outgrower crops processed in our mills, included within our scope 3. This is consistent with previous years reporting and is aligned to the WRI reporting principles of completeness and relevance, whereby scope 1 are the direct emissions sources that we own and control. The WRI Greenhouse Gas Protocol is due to issue further guidance on carbon reporting within the agricultural sector in 2022. As draft guidance is made available we will review our reporting approach and make any changes to align as necessary.

Emissions from land clearance are only reported for the land clearance occurring during the reporting year in question due to lack of industry acknowledged guidance on amortisation (the period over which land clearance emissions should be distributed). We review industry guidance each year and update our methodology as appropriate. There has been no further guidance throughout 2020, thus the approach taken this year is in line with our previous years reporting.

Terminology

Our emissions and energy use for 2020 is presented in Table 1. The following terminology is used.

CPO – Crude Palm Oil

FFB – Fresh Fruit Bunches

POME – Palm Oil Mill Effluent

Emissions and energy use

	Emissions Source	Global Emissions tCO ₂ e		Variance	UK Emissions tCO ₂ e*		Variance
		2019	2020		2019	2020	
Scope 1	Fuels	18,650	19,613	+5%	0	0	0%
	Plantation vehicles	9,399	14,442	+54%	0	0	0%
	Fertiliser use	26,614	19,719	-26%	0	0	0%
	POME Treatment	212,215	124,429	-41%	0	0	0%
	Sequestration	-549,475	-531,479	+3%	0	0	0%
	Land clearance	322,182	617,678	+92%	0	0	0%
	Peat soil cultivation	488,823	488,858	+0.01%	0	0	0%
Total Scope 1		528,408	753,260	+43%	0	0	0%
Total Scope 2	Electricity	1,984	2,657	+34%	0	0	0%
Total Scope 1 & 2		530,392	755,917	+43%	0	0	0%
Scope 3	Electricity transmission and distribution	188	211	+12%	0	0	0%
	3rd party vehicles	7,367	8,317	+13%	0	0	0%
	Outgrower land clearance	285,094	510,467	+79%	0	0	0%
	Outgrower peat soil cultivation	54,790	51,241	-6%	0	0	0%
	Outgrower sequestration	-446,388	-439,239	+2%	0	0	0%
Total Scope 3		-98,949	130,997	-232%	0	0	0%
Total (Location Based)		431,443	886,914	+106%	0	0	0%
Total Energy Usage (kWh)¹		1,210,757,362	1,289,300,798	+6%	0	0	0%
Intensity ratio	tCO ₂ e per hectare of planted area	6.4	12.7	+98%	0	0	0%
Intensity ratio	tCO ₂ e per tonne CPO production	1.1	2.2	+100%	0	0	0%
Intensity ratio	tCO ₂ e per tonne FFB production	0.4	0.8	+100%	0	0	0%

Table 1 – Energy and carbon disclosures for reporting year.²

* Note Anglo Eastern plantations Plc is a UK registered company. However, the business does not have any physical presence within the UK, hence the 0% contribution of UK emissions. It is shown in the table for transparency.

¹ Energy reporting includes kWh from scope 1, scope 2 and scope 3 3rd party vehicles only (as required by the SECR regulation)

² This work is partially based on the country-specific CO₂ emission factors developed by the International Energy Agency, © OECD/IEA 2019 but the resulting work has been prepared by Anglo-Eastern Plantations Plc and does not necessarily reflect the views of the International Energy Agency

APPENDIX

This is the first year that AEP are required to report to the UK Streamlined Energy and Carbon Reporting (SECR) regulations. As such, the format of the report has changed. To provide comparison with previous years the data is also provided in a similar format below.

Emissions source	Results (tCO ₂ e)			
	2019		2020	
POME Treatment	212,215		124,429	
Fertiliser application	26,614		19,719	
Fuel use	18,650		19,613	
Electricity consumption	1,984		2,657	
Electricity T&D	188		211	
Company owned vehicles	9,399		14,442	
Third party vehicles	7,367		8,317	
Total operational emissions	276,417		189,388	
	Own crop	Outgrower	Own crop	Outgrower
Land clearance	322,182	285,094	617,678	510,467
Carbon sequestered	-549,475	-446,388	-531,479	-439,239
Peat soil cultivation	488,823	54,790	488,858	51,241
Total land use emissions	155,026		697,526	
Overall emissions	431,443		886,914	

Table 2 - 2020 vs 2019 emissions comparison

The normaliser reported within the main report is calculated using total CO₂e emissions. In previous years the normaliser has been calculated on operational emissions only. This reduces the influence of the fluctuations in agricultural emissions. As such, the operational normalisers are also reported below.

	2019	2020
Per hectare of planted area	4.07	2.72
Per tonne CPO production	0.70	0.47
Per tonne FFB production	0.27	0.17

Table 3: 2020 vs 2019 Operational emissions intensity (tCO₂e)

AEP's operational emissions include POME treatment, which have decreased significantly in 2020 due to the change of treatment from anaerobic lagoons to a biogas plant. These process efficiencies are being realised even as production increases. The change in fertiliser application upon recommendation from AEP's agronomist is equally yielding higher production with lower carbon impact.

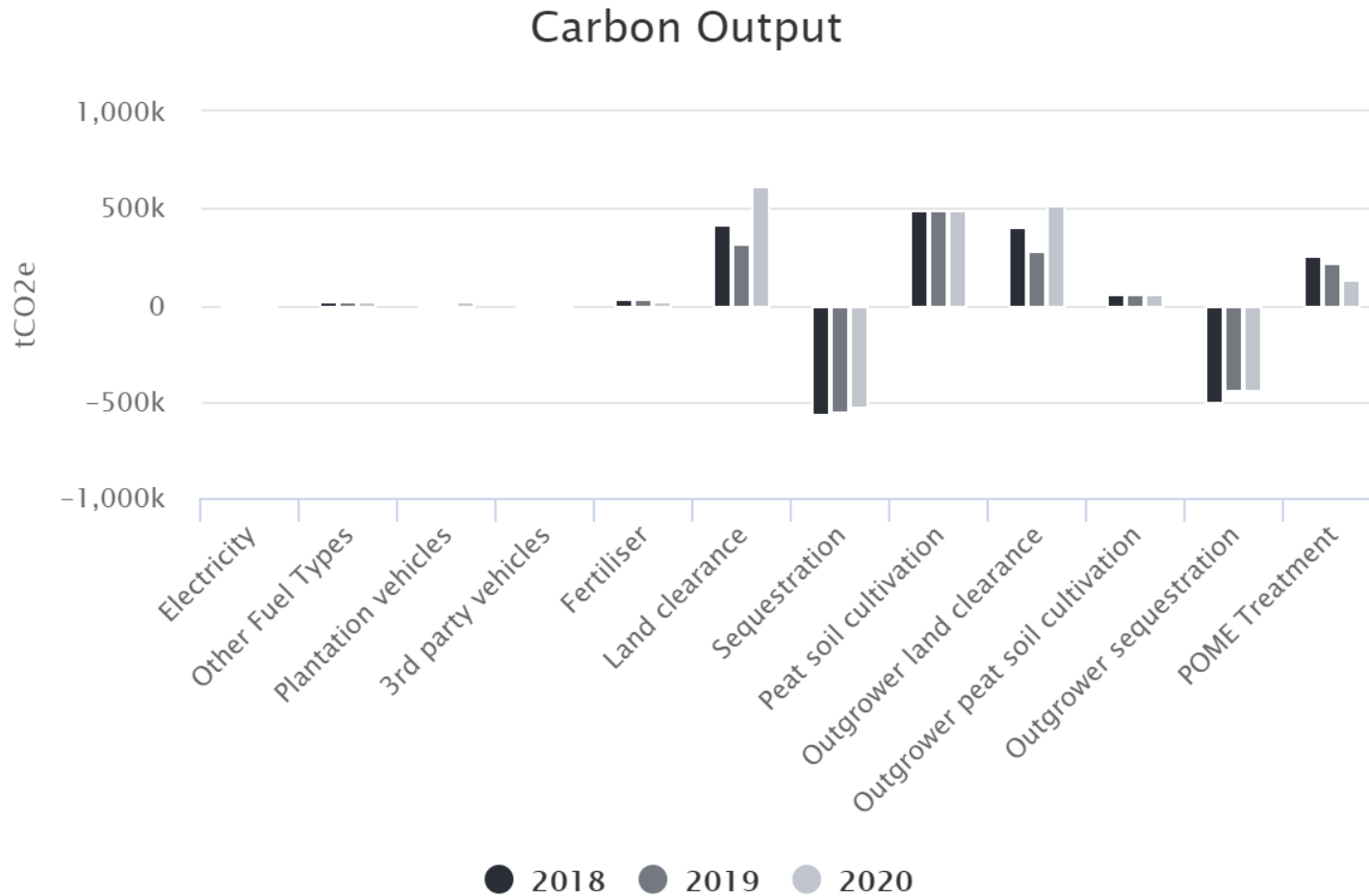


Figure 1: Year on year comparison - carbon footprint by emissions source