

Greenhouse Gas Emissions Inventory and Annual Streamlined Energy & Carbon Report

Hillside Environmental Services Year 2019





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1. Environment

We are committed to reducing the environmental impact of our operations, by improving our energy efficiency, reducing our consumption of natural resources, and managing our waste production and disposal, progressively reducing our carbon emissions.

In 2007 we planted 7,200 broadleaf trees and converted 3.2 hectares of arable land to natural woodland. This project has continued to thrive, improving biodiversity and establishing a natural habitat for wildlife to flourish, as well as sequestering carbon from the atmosphere, offsetting our carbon footprint. (ref Forestry Commission report "Forests, Carbon and Climate Change: the UK Contribution")

During 2019 we installed new technology to electrify our building energy requirements and converted our grid supply arrangements to 100% green energy, effectively net zeroing our energy related emission.

The main channel of operational emissions is now transport related, and as the business moves to a "new normal" post lockdown, we will focus on changes to transport habits and methods to further reduce our environmental impacts.











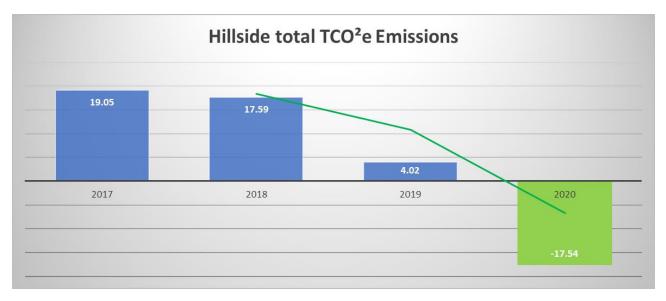
2. Carbon emissions

During 2019 our net emissions of CO2e were 4.02 tonnes - a 77% reduction over 2018 and a 79% reduction since 2017.

These improvements have arisen as a result of the technology investments made during 2019, the changes to the business's operational boundary, with the reduction in transatlantic flights from our activity.

During 2020 the ongoing impact of pandemic lockdown has effectively removed all transport emission and our current emissions profile midway through 2020 stands at (-17.5 TCO²e).

Our expectation of "new normal" will be a net negative of (-11 TCO²e) ahead of further investments into transport or on site energy storage.



Having achieved a negative carbon footprint, we will continue to focus on reducing our overall carbon emissions across all business activity, encouraging supply chain participation to further reduce scope 3 emissions impacts on our clients.

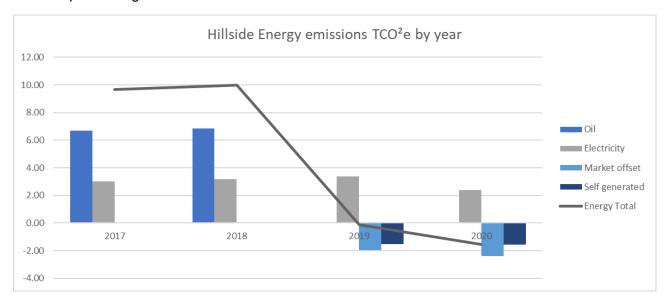
3. Energy management

Following a programme of building energy efficiency improvements, covering controls, insulation and lighting, during 2019 we made further investments into the building energy system, installing

- A ground source heat pump system, removing 2,100 litres of heating oil from our annual energy mix
- A Solar Photovoltaic array sized to meet some of the additional electricity loads of the heat pump system.
- Contracted a 100% renewable electricity grid supply with Bulb Energy, ensuring all of our building energy needs were free of carbon emissions.



The works were completed part way through 2019, but the project has already made a significant impact on our greenhouse gas emissions profile including generating a surplus of electricity that has been exported to grid.



This export activity has established an annual offset opportunity that will further reduce our future greenhouse gas emissions.

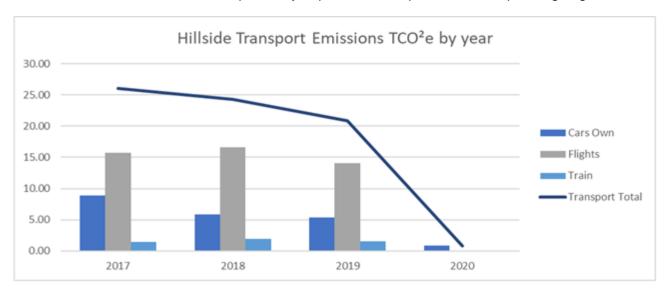
2020 will be the first full year of system operation and the targets set have already been achieved by September, with forecast that our associated annual emissions form energy will be -1.5TCO²e

4. Transport management

Transport remains our largest source of greenhouse gas emissions, covering all scope 1 & 3 emissions in Road, Rail and Air travel.

During 2019 transport emissions were 20.89 TCO²e with air travel the largest source of emissions.

Towards the end of 2019, the business withdrew from activities in North America, reducing the need for transatlantic travel, this will positively impact our transport emissions profile going forward.





During 2020 the pandemic lockdown has had the most significant impact on transport emissions, reducing all forms of travel to virtually zero and forcing the business to embed remote working and virtual meetings into our day to day activity.

We expect these new working practices to continue into the "New Normal" and help in further reducing our transport emissions, however these operational shifts will not totally displace our transport requirements and we have forecast associated emissions to level out at an around 6TCO²e per year if we continue to use fossil fuel powered vehicles.

Consequently, we have made the decision that before June 2022 we will change the current fleet to electric vehicles and remove road vehicle greenhouse gas emissions from our inventory.

5. Waste and resources management

Waste, water and other emissions associated to our activities created 0.28 tCO²e in 2019 and we will continue to reduce the volume of waste we produce and to increase the amount of recycling we do. In the year we

- Composted all food waste on site, covering around 4% of the total waste generated
- Sorted and Recycled 55% of the waste generated &
- Sent 41% to landfill

Our landfill waste is primarily unrecyclable packaging, where wider recycling is restricted due to limited facilities within our local authority area.

6. Sequestration

Hillside environmental services have created the Hillside woodland project to reduce the net green-house gas balance of our business. The project is monitored and verified to the <u>UK Woodland Carbon Code</u> and has listed 1,294 Pending Issuance Units (PIUs) representing the tonnes of carbon dioxide which is expected to be sequestered between 1st January 2007 and 31st December 2106 helping us to achieve our carbon neutral status

2019 is the first year of declaring our sequestered carbon and we have elected to limit this to the current year PIUs, opting to bank the 34 units accrued during the first 10 years of the project for future offsetting if required.

The PIUs for the Hillside woodland project represent an expected sequestration of carbon dioxide that, if converted to Woodland Carbon units, will have a positive impact on our climate.



7. Carbon report

		2017 (Ba	ase year)	20	19
Type of Emission	Activity	tCO ² e	activity	tCO ² e	activity
Scope 1 (direct)	Oil combustion (liters)	6.68	2,100	0.00	0.0
	Vehicle Fleet (miles)	8.88	31,500	5.31	18,500
	Refrigerants (F-Gas's)	0.00	0	0.00	
Scope 2 (direct)	Grid Electricity (location) kWh's	3.00	11,750	3.36	13,150
Scope 3 (Indirect)	Air travel (kilometers)	15.7	86,854	14.04	77,646
	Rail travel (kilometers)	1.44	35,000	1.54	37,500
	Grey fleet	0.00	0.0	0.00	0.0
	Water (cubic meters)	0.3	325	0.24	265
	Waste (tonnes)	0.06	0.96	0.04	0.96
Gross TCO ² e pre offset		36.05		21.06	
Offsets	Market based grid electricity	0.00		(1.94)	
	Self-Generated electricity	0.00		(1.53)	
	Sequestration – Tree plantation	(17.00)		(17.00)	
	Other	0.00		0.00	
Net TCO ² e		19.05		4.06	

Intensity ratios

Employees	2	10.025	3.325	
Building M ²	232	0.086	0.028	

Assessment parameters

Baseline year	2017
Reporting Organisation	Hillside MS ltd. TA Hillside Environmental Services
Person Responsible	R.Burton - Director
Reporting period covered	Annual full year to 31st Dec 2019
Organsiation boundaries	Facilities over which Hillside Environmental has operational control
Methodology used	GHG protocols Corporate standards and SECR Reporting guidelines
Emissions factors used	UK Government conversion factors for Company set
Exclusions	None
Included Scope 3 emissions	Waste, Water & Transport
Scope 2 emissions	Combined Location & market-based emissions factors, with self-generated offset