Hay Town Council

the green valleys

Direct Carbon emissions

The following table of energy use and resulting carbon emissions was generated from partial billing data from 2021. To fill gaps in data, an average monthly figure was created from the available billing periods and used to create a full 12 month total.

A total of three properties were assessed from the billing data:

- Pavilion
- Oxford Road public convenience
- Pavement public convenience

	Electric - kWh	Emission Factor	kgCo2e	Gas- kWh	Emissions Factor	KgCo2e	Petrol - km	Kg Co2
Pavilion	3312	0.21233	703.24	9097	0.18438	1677.30486		
Oxford Rd WC	2483	0.21233	527.22	0	0.18438			
Pavement WC	2050	0.21233	435.28	0	0.18438			
		0.21233	0.00	0	0.18438			
								0
Total	7845		1,665.73	9097		1677.30486		0
					Kg Co2e	Tonnes		
TOTAL HTC Carbon emissions:					3,343.0	3.3		

While these buildings have not been properly surveyed, some suggestions for energy saving can be made. However, these should not be acted upon until a proper assessment has been made.

Both the public conveniences showed consistent electricity use over the year. This is likely due to lights running for fixed opening hours, regardless of season or level of use. By their nature, conveniences tend to have limited natural light. A review of the lighting system to upgrade to LEDs and sensor control is likely to result in a significant reduction in electricity use. If the roof structure and orientation is favourable, a small solar PV and battery system could potentially provide all of the necessary electricity demand.

The pavilion has not been constructed to be energy efficient as its original purpose was for summer use only. There may be some improvements to be made to lighting and draught exclusion that might be cost effective over the short term. If the building continues to be frequently occupied over the winter period, some investment may be necessary. A full survey would also be beneficial, if the building is to be used for at least another 2 years.

