

# Do Museums care about Energy Efficiency and Sustainability?



**Association of  
Independent  
Museums**

Helping Heritage  
Organisations Prosper

There is widespread agreement within the museum sector that there are many practical steps museums can take to improve sustainability.

To help AIM members identify their most pressing needs, the AIM Energy Action Group has produced this Desktop Survey to help highlight areas for improvement and provide ideas and analysis on how to evolve a continuous efficiency plan.

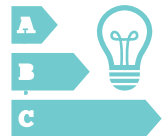
## **Managing demand and implementing energy efficiency measures could save up to 30% of your energy consumption**

The Government is targeting energy efficiency as a way of reducing UK wide energy demand and is urging organisations to act by exploiting energy efficient equipment and processes.

This survey will help evaluate your current energy performance and provide a guide to the potential for improvements. It will be carried out in conjunction with an energy manager from AIM EAG and it seeks to identify areas of potential for

improvement. You should allow approximately ½ to ¾ hour in your diary to complete this.

## **Assess your Carbon Emissions**



Choose a time and place to quietly complete the questions. If you are not sure about the answers, then just move on to the next question. If you don't know, or are not sure about your energy consumption details, leave this section blank. We can always gather this information at a later date.

*Once this is completed and returned to the email address below, we will contact you to arrange a follow-up and work through the information you have provided, taking care to ensure we identify key issues that will help inform and determine the next steps.*

**When completed, please return it to  
[aimeag@touchstoneservices.co.uk](mailto:aimeag@touchstoneservices.co.uk)**

## ORGANISATION

DATE:

Company/Museum		Address		Post Code	
Contact Name		Position		Telephone	
Email				Fax	
Key person for Energy performance issues		Key person email:		Key person phone:	
Company Reg. No:		Charity No:		Financial Director	

## BUILDING CHARACTERISTICS

Internal floor area m <sup>2</sup>		Overall site area m <sup>2</sup>		Number of staff?	
Any special features (listed building)?					
Property Construction Type?		Who owns the Premises?			
Date of construction		No of Floors			
Are there any other occupants or tenants?		Who pays the bills?			
How long have you been resident in your building(s)?		Number of annual visitors?			
Do you have a current Display Energy Certificate (DEC)?		Date DEC Renewal Due?			
Facilities: Exhibition rooms, restaurants, auditorium etc.					
What post-construction energy initiatives have been carried out to the building? i.e. Increased insulation, double glazing.					
Have your buildings been designed for energy efficiency?					
Do your <b>exhibits</b> consume energy or water? i.e. Steam, LPG					
Have undertaken a lighting review and made any improvements?					
Do you have your own servers?					
Any of the following: Automatic controls (BMS, PIR, Timers etc.)					

Any specialist equipment i.e. humidifiers, under floor heating?				
Fuels used: gas, electric, LPG, oil, Biomass, fuel cells, ground source, air-source heat pumps:				
ELECTRIC consumption		ELECTRIC supplier		OTHER consumption (LPG, Oil)?
GAS consumption		GAS supplier		OTHER supplier?
WATER consumption		WATER supplier		Are there lifts or escalators?
Photos of Building		Photos of meters		
Has a thermal imaging survey been undertaken?				
Are your water costs high?				
Any vending machines or water coolers? Are they turned off at night?				
Do you have problems heating or cooling the building or specific areas?				
Do staff complain of excessive cold or heat?				
Do staff complain of inadequate or excessive lighting?				
Do certain areas require above average heating or cooling?				
Are you aware of any processes using energy whilst the building is unoccupied?				
Are you receiving detailed energy reports from your supplier?				
Do you have high-voltage electricity onsite?				
Do you use air-conditioning in summer?				
Have you considered moving to a green tariff?				
Are you adjacent to a river, lake, sea, or other body of water?				
Are there any other buildings in your portfolio?				
Are you planning to move to a new site?				
Will you be further developing or improving any sites?				
Will you be acquiring or disposing of any sites?				
Have you been involved in any Asset Transfers?				

# EFFICIENCY & SUSTAINABILITY

Do you have a formal, written energy policy?	
If you have an energy policy, are staff and volunteers informed about it?	
Have you engaged with your staff and volunteers in energy, sustainability and the environment?	
Do you provide energy efficiency training for staff/volunteers? (Energy Champion)	
Do you know your carbon footprint?	
Is non-essential equipment turned off when not in use?	
Do you measure and report on your carbon emissions?	
Do you benchmark your energy usage against visitor numbers?	
Have you already invested in any energy efficiency measures?	
Are you currently planning any energy efficiency projects?	
Are you aware of any potentially important energy saving opportunities?	
Do you have funding available for energy efficiency projects?	
Are you accredited under any energy efficiency or ISO scheme?	
Have you engaged with your visitors or members on energy efficiency or sustainability?	
Do you take manual meter readings for gas, electricity and water?	
Do you check your energy and water bills for errors, or make use of all the information in them?	

Do you look for reasons for increased energy costs and usage?	
Are energy issues regularly reported to senior management?	
Have you installed water-saving devices?	
Are you well-informed as to future energy cost increases in coming years?	
Do you budget for energy costs for the next 12, 24, 36 months (or more)?	
Do you have gas, electricity or water <u>Smart Meters</u> installed?	
Do you receive detailed energy usage reports tailored to your sites?	
Is the building efficient? i.e. Is it well insulated?	
What do you consider would be the main processes consuming electricity?	
What do you consider would be the main processes consuming gas?	
How old are your boilers and are they efficient?	
Are your boilers serviced regularly?	
Glazing: Single/Double/Triple?	
Underfloor heating?	
Walls: cavity	

## RENEWABLES – HAVE YOU, OR ARE YOU CURRENTLY CONSIDERING ANY OF THE FOLLOWING

Do you have your own car park, if so, how large is it? Is it shaded by buildings or trees?	
Are you investigating Electric Vehicle (EV) charging points?	
Do you currently have a Solar Panel installation?	
Are you considering or evaluating Solar Power?	
If you have Solar Panels are you monitoring export consumption and matching it with import consumption?	
Are you familiar with Battery storage?	
Do you have any of the following: Air, water or ground source Heat Pump	
Are you using or considering Combined Heat & Power (CHP)	
Are you using or considering Biomass boilers?	
Are you engaged in any Carbon Offset program?	
Are you using or considering Water harvesting?	

*The section on the next page looks at ways to help you reduce energy wastage. Surveys have revealed that many organisations can save up to 12% of their energy costs by avoiding wastage.*

The following chart is designed to illustrate the periods when your buildings are unoccupied, partially occupied or fully occupied. We can use this information to map against your energy and water consumption. **Unoccupied** will be when no one is present on your site. **Shoulder** will be when a small number of staff are on site (for example: cleaning staff, IT people. **Core** will be during normal working hours with staff present as usual.

**SAMPLE REPORT**

AM							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Unoccupied</b>	00.00 – 07:30	00.00 – 07:30	00.00 – 07:30	00.00 – 07:30	00.00 – 07:30	00:00 – 09:00	00:00 – 12:00
<b>Shoulder</b>	07:30 – 08:30	07:30 – 08:30	07:30 – 08:30	07:30 – 08:30	07:30 – 08:30		
<b>Core</b>	08:30 – 12:00	08:30 – 12:00	08:30 – 12:00	08:30 – 12:00	08:30 – 12:00	09:00 – 13:00	
PM							
<b>Core</b>	12:00 – 17:30	12:00 – 17:30	12:00 – 17:30	12:00 – 17:30	12:00 – 17:30		
<b>Shoulder</b>	17:30 – 19:30	17:30 – 19:30	17:30 – 19:30	17:30 – 19:30	17:30 – 19:30		
<b>Unoccupied</b>	19:30 – 00:00	19:30 – 00:00	19:30 – 00:00	19:30 – 00:00	19:30 – 00:00	13:00 -00:00	12:00 – 00:00

**YOUR SITE**

AM							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Unoccupied</b>							
<b>Shoulder</b>							
<b>Core</b>							
PM							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Core</b>							
<b>Shoulder</b>							
<b>Unoccupied</b>							

Additional Notes: Is there any additional information that can add value to this survey?

\*The name of a designated person with whom to discuss findings.

**A subsequent section to this survey:** 'Energy Review – Client Data Capture' can be used to gather more detailed information about your site(s)