

# 1.4.1 Key Environmental Performance Indicators

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## Document Control

<b>Title:</b>	Key Environmental Performance Indicators	<b>Document Number:</b>	1.4.1
<b>Issue / Revision status:</b>	Issue 1: Approved		
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<b>Approval:</b>	Sustainable Development Management Champions	<b>Date:</b>	10 <sup>th</sup> July 2009

## Summary

This document states the KEPIs that Wiltshire College will measure and report on, including the means of obtaining data, standardisation and reporting.

## Introduction

Accurate monitoring of the aspects of College activities that cause environmental impacts is essential in order to establish the degree of those impacts, establish priorities, and set objectives and targets for improvement.

## Government guidance

The UK Government wishes organisations in both private and public sectors to report on their environmental performance in key areas, and have published reporting guidelines for organisations to follow<sup>1</sup>. The educational sector is prompted to report on three areas:

- Greenhouse gases
- Waste
- Acid rain and smog precursors

The sector is also prompted to report on Supply chain impacts, in particular

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<sup>1</sup> "Environmental Key Performance Indicators Reporting Guidelines for UK Business", Defra, 2006.

- water.

## Additional topics

In addition, the College will report on:

- Other significant environmental aspects as identified by the strategy team, such as biodiversity issues;
- Progress with implementing the environmental management system;
- Compliance issues.

## Methodology

Quantified methods will be used wherever appropriate, and all measures will be reported as total amounts, and also in proportion to learning or other delivered service as appropriate.

## Greenhouse Gases

Minimal greenhouse gases are released directly by activities carried on by the College; our reporting on greenhouse gases will therefore be based on our indirect emissions.

Purposes:

- Identify overall contribution of College to enhanced greenhouse effect
- Determine whether the College's contribution is sufficient to trigger requirements for Carbon Reduction Commitments
- Identify potential savings, to allow effective cost/benefit decision making
- Prioritise improvements
- Allow improvements to be tracked to aid effective management.

Element being measured	Units of measurement	Relative to	Method for collection
Electricity	<b>Tonnes CO2 equivalent</b> Cost KWhr	Learner hours per site (although some contribution to total learning hours occurs off site and does not contribute to the electricity consumed by the College, this is small in relation to the total). Building floor area.	Monthly returns by electricity suppliers.
Gas	<b>Tonnes CO2 equivalent</b> Cost	Learner hours per site	Monthly returns by gas suppliers
Heating oil	<b>Tonnes CO2 equivalent</b> Cost	Learner hours per site, corrected for winter	Annual returns by suppliers

	Litres	weather conditions	
<i>Organic wastes used in boiler @lackham</i>			
Staff Travel - Vehicle fuel and public transport <ul style="list-style-type: none"> <li>- College vehicles (separated for type of vehicle and type of fuel)</li> <li>- Agricultural vehicles</li> <li>- Private vehicles</li> </ul>	<b>Tonnes CO2 equivalent cost</b>	Distance travelled Learner hours (total)	Estates records for College vehicles; Expenses claims for private vehicles and use of public transport
<i>KPI for introduction at later stage: Student travel and staff commuting</i>	<b>Tonnes CO2 equivalent</b>  <b>Facilities for cyclists (bike rack spaces)</b>	<i>Total distance travelled</i>	<i>Surveys</i>

## Waste

Purposes:

- Identify overall contribution of College to landfill
- Ensure compliance with Hazardous Waste Regulations 2005
- Monitor effectiveness of recycling initiatives

Waste data by weight will be collected for:

<b>Element being measured</b>	<b>Units of measurement</b>	<b>Relative to</b>	<b>Method for collection</b>
Mixed non- hazardous waste disposal	Tonnes Cost	Learner hours per site	Returns from waste collection contractor
Hazardous waste (separated by type with reference to European Waste Catalogue)	Kg per type of waste Cost	Learner hours per site	Hazardous Waste Consignment Notes
Recycling	Kg per type of material Cost / income	Learner hours per site; Consumption (where figures available)	Returns from waste collection contractor

In addition non-quantified information on re-use of items and materials that would otherwise be waste will be reported on.

## Acid rain and smog precursors

### Purposes

- Identify overall contribution of College to acid rain and local air pollution
- Inform management decisions on maintenance and fuel types
- Inform farm management decisions to minimise eutrophication.

The key releases that cause acid rain and smog are SO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub> and CO. These arise from boilers, vehicle exhausts and some agricultural activities.

Element being measured	Units of measurement	Relative to	Method for collection
SO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> and CO (excluding emissions from agriculture)	Tonnes	Learner hours per site	Calculated from electricity, oil and transport elements above.

Standard calculations based on fuel consumption will be used to calculate emission levels.

## Supply Chain impacts

As well as impacts associated with the generation of electricity used by the College, Defra recommends that we report on water consumption using information from the supply company/ies. *The Strategy Team requires paper consumption to be included.*

### Purposes

- Minimise water stress on the environment and other users
- Minimise energy use and consequent contribution to enhanced greenhouse effect due to treatment, supply and disposal of water
- Determine water use efficiency
- Institute measures to improve efficiency

Element being measured	Units of measurement	Relative to	Method for collection
Water	Litres	Learning hours per site	Water bills
Paper	Reams or Kg	Learning hours per site	Invoices

## Products

The introduction of environmental issues into syllabuses will be reported on, although no KEPIs will be based on this as it is not possible to produce comparative quantified data.

## Outcome

A report detailing KPEIs will be presented to the annual review of the environmental management system.

