# ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL

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**Approved by:** EMS Working Group  
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## CHANGES TO THE ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL

<table>
<thead>
<tr>
<th>Ver.</th>
<th>REASON FOR THE CHANGE</th>
<th>Date</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Created as part of Gold phase</td>
<td>January 2012</td>
</tr>
<tr>
<td>1.1</td>
<td>Updated for platinum phase</td>
<td>October 2012</td>
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</table>
| 2.0  | Change of scope and specification of Document Management System  
Inclusion of section describing EMS Review team within 3.1 Resources, roles responsibility and authority. | January 2013 |
| 2.1  | Update scope of EMS and addition of 'Promoting Sustainable Food'  
OCP – | September 2013 |
| 2.2  | Change of legislation advisor to CEDREC; withdrawal of OCP 3.6.20 and inclusion of OCP’s 3.6.23 through to 3.6.27; insert updated governance structure (Fig 2); insertion of separate section 3.5 to match EMS. | October 2014 |
| 2.3  | Updates throughout to reflect current practices and terminology | January 2016 |
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The aim of the Environmental Management System Manual (EMS Manual) is to explain the core elements of the EMS and their interaction. The EMS Manual contains information on the Canterbury Christ Church University’s activities, products and services and the organisation’s management structure. It also acts as an index for locating key documents (e.g. procedures) in accordance with the specifications of the Scheme and ISO 14001. The EMS Manual shows the organisation’s capacity to comply with its environmental policy and, along with supporting documents, serves as an internal reference for staff.

A. SCOPE
The University is based in the historic city of Canterbury, with three other locations throughout the beautiful county of Kent, being:

- Medway Campus (Chatham)
- Broadstairs Campus
- Salomons Centre, Southborough nr. Tunbridge Wells (leased properties)

However, due to the sale of the Salomons and downscaling of operations, the scope of the EMS includes only the Broadstairs and Medway Campuses in addition to the Canterbury Campus but excluding the former prison grounds purchased in 2014.

The Environmental Management System (EMS) covers the buildings and land shown in the site plans found in Records/Environmental history & plan of sites. The organisation occupies some 55 buildings at 3 campuses. It has 1,800 employees and nearly 20,000 students.

University offers excellent teaching facilities in unique and inspiring locations. It is the largest centre of higher education in Kent for the public services; notably teacher training, nursing, policing, health and social care, and a significant provider of programmes in a wide range of academic and professional areas.

More information about the University can be found on the website at:

http://www.canterbury.ac.uk/about-us/about-us.aspx

B. NORMATIVE REFERENCES
The EMS Manual has been written following the requirements of an EMS taking into consideration the guidelines contained in regulation EN ISO 14001:2004 “Environmental management systems – Requirements with guidance for use”.

C. TERMS AND DEFINITIONS
The definitions for the most frequently used terms used in the EMS documentation:

- **Organisation**: The total physical space where the EMS is operated.
- **Environmental policy**: “Overall intentions and direction of an organisation related to its environmental performance as formally expressed by top management.” (ISO 14001).
- **Environmental aspect**: “Element of an organisation’s activities or products or services that can interact with the environment.” (ISO 14001).
- **Environmental impact**: “Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation’s environmental aspects” (ISO 14001).

**D. ENVIRONMENTAL MANAGEMENT SYSTEM REQUIREMENTS**

The EMS is fully functional and meets the following requirements:

- **Planning**
  The organisation has secured senior management endorsement of the Draft Environmental Policy and resources are made available for the implementation of the EMS. An initial baseline environmental review is conducted to investigate current activities and associated impacts. Training needs are identified and activities are initiated.

- **Implementation**
  The organisation’s environmental aspects and legal requirements are identified and environmental programmes established to meet the objectives and targets set. The environmental policy gives the organisation’s commitment to legal compliance, continual environmental improvement and the prevention of pollution in a public statement.

- **Operation**
  Resources are in place and roles, responsibility and authority are assigned. Training is conducted and competence assessed, communication is addressed and all EMS documentation is controlled. Operations are also controlled and a clear emergency preparedness and response programme is in operation.

- **Checking & Correcting**
  Audit procedures are in place to verify that the environmental policy and the objectives and targets are being fulfilled. Non-conformances are identified and corrective and preventive actions implemented. Top management check, at planned intervals, that the EMS is functioning effectively and that continual improvement is being achieved.

1. **PLANNING**

Procedure 1.1.1 General requirements; explains how to establish, document, implement, maintain and continually improve an EMS in accordance with the requirements of the Scheme & the International Standard EN ISO 14001:2004. It also explains how the organisation meets the requirements of the Scheme, as well as define and documents the scope of the EMS.

2. **IMPLEMENTATION**

2.1 Legal and other requirements

Procedure 2.1.1 Legal and other requirements; describes the method used, and identifies those responsible for, identifying, accessing, reviewing and updating legal and other regulatory requirements. The organisation subscribes to CEDREC which provides regular updates of environment legislation. Each Responsible Person assesses the implications of relevant legislation and regulations for the organisation. The Legal Register and all other legal records are located in folder Records/Legal register in the document management system.
2.2 Environmental aspects
Procedure 2.2.1 Environmental aspects; explains how the organisation’s environmental aspects are identified, recorded and updated and their associated impacts documented. It sets out the responsibilities and methodology to follow for identifying and determining those environmental aspects that have or may have a significant impact on the environment.

The following review areas are addressed: construction and refurbishment; engagement; emissions and discharges; energy and water; health, welfare and safety; environmental management systems; policy; procurement; transport; waste management and curriculum.

The University Aspects Impact Assessment Tool is used to assess the significance of each aspect using a methodology developed from the University risk management process. The ranked Aspects & Impacts Register is located in the ‘Records/Aspects & Impacts register’ folder, in the document management system.

2.3 Objectives, targets & programmes
The procedure 2.3.1 Objectives, targets and programmes; describes how the organisation determines its environmental objectives and targets for reducing its impacts on the environment. Each objective has at least one or more measurable targets for improvement with time-scales.

The EMS Working Group and the working groups that make up the ‘the sustainability governance structure’ (fig 2. Section 3.1) annually establish the organisation’s environmental objectives based on:

- the organisation’s environmental policy;
- requirements of the EMS;
- legal requirements;
- significant environmental aspects;
- revisions of the EMS;
- technological options;
- financial and operational requirements;
- the views of interested parties.

The objectives and targets are listed on a spreadsheet along with the environmental management programme. The EMS Manager, EMS Working Group and the Sustainability Strategic Management Group are responsible for establishing, implementing and maintaining the programme to meet the targets.

This procedure also describes the programmes used to fulfil the organisation’s objectives and targets. The EMS Manager and the EMS Working Group, review the objectives and targets annually with reference to audit findings.

2.4 Environmental and sustainability policy
The environmental policy procedure explains how the organisation’s environmental policy is written and revised. This procedure and the organisation’s current environmental policy are located in folder 2.4 Environmental policy in the document management system. The organisation wishes to incorporate good environmental practices into all areas of the business. To achieve this, top management is committed
to implementing an EMS that conforms to the requirements of the Scheme and ISO 14001. This will continually improve the organisation’s environmental performance, ensure legal compliance and prevent pollution.

3. OPERATION

3.1 Resources, roles responsibility and authority

Procedure 3.1.1 Resources, roles, responsibility & authority; explains the method used to assign roles, responsibility and authority. The individuals and committees responsible for implementing the EMS are shown in fig.1. An overview of the whole Sustainability governance structure is shown in fig.2. The details of the roles and responsibilities associated with the EMS are as follows:

Fig. 1: A flow chart showing those responsible for the organisation’s EMS.
Fig. 2: The Sustainability governance structure (09/15).

**Sustainability Strategic Management Group** (Top managers and the EMS Manager)
- Secure the resources required to maintain the EMS.
- Ensure the EMS is established, implemented and maintained.
- Monitor the performance of the EMS.
- Establish, review and revise the organisation’s environmental policy, objectives and other elements of the EMS.

**EMS Manager and EMS Coordinator**
- Represent the environmental programme at Sustainability Strategic Management Group meetings.
- Coordinate and lead the membership of the institution’s Sustainability governance structure.
- Identifies and prioritises environmental aspects and impacts.
- Coordinate the setting of objectives and targets through relevant Working Groups of the SSMG.
- Ensures that appropriate roles, responsibility and authority are assigned.
- Assists in the identification and delivery of environmental training
- Provides internal and external communications.
- Compiles, updates, approves, controls, stores and distributes documents related to the EMS
- Ensures all relevant legislation and requirements are identified, listed and updated.
- Maintains a check on whether institution complies with relevant legislation and requirements via the internal audit process and O.C.P development.
- Organises the programme of internal audits and management reviews.
- Ensures internal EMS auditors are appropriately trained.
- Reports to the Sustainability Strategic Management Group on the functioning of the EMS.
- Revises procedures, instructions and other EMS documentation.
- Coordinates external audits as required.

**EMS Working Group**

This group comprises the EMS Manager, EMS Coordinator, Lead Internal Auditor and any other auditors that are available

The team meets on a regular basis to:
- Discuss the implementation and maintenance of the EMS.
- Devise and promote initiatives to inform interested parties about the EMS.

**Sustainability Strategic Management Group**

This group comprises the EMS Manager, the chairs of all working groups, and other relevant senior managers (e.g. the Director of Marketing and the Director of Finance).

It meets 4 times per year, including once as the EMS Management review committee.

**Staff**

Specific staff will:
- Liaise with suppliers and contractors to ensure that they meet the organisation’s environmental requirements.
- Provide the EMS Manager and the EMS Working Group with appropriate operational control records.

**Suppliers/Contractors**

- The organisation’s suppliers/contractors should satisfy the Responsible Persons and key operational staff that they are conforming to the relevant legislative requirements.
- Provide the key management and operational staff with appropriate operational control records.

The Responsible Persons communicate the description of roles and responsibilities to all relevant staff through annual appraisals. All signed descriptions of the roles and responsibilities, and appraisal documents are then stored by the relevant manager within their own confidential filing system.
3.2 Competence, training and awareness
Procedure 3.2.1 Competence, training and awareness; explains how environmental training is managed. The EMS Manager and individuals within the EMS Working Group identifies people performing tasks for, or on behalf of, the institution that have the potential to cause significant environmental impacts. This includes those associated with the institution’s environmental aspects and EMS. Their competence is assessed at appointment and reviewed through the University’s annual appraisal process to establish whether they have the appropriate education, training or experience to undertake their role within the EMS. If deficiencies are identified via the audit process the EMS Manager or individuals within the EMS working group instigates a programme of relevant training, or takes other action, to address these deficiencies.

3.3 Communication
The organisation uses procedure 3.3.1 Communication; to ensure that internal and external communications, relating to the EMS, are dealt with appropriately. It describes how to receive, document and respond to communications with interested parties. All communication records are located in folder Records/Communication.

3.4 Documentation
Procedure 3.4.1 Documentation; describes the method used to control EMS documentation. The Document Management System is held on Blackboard CLIC. Various documents are used to ensure the effective operation of the EMS, namely:

EMS Manual
This is the overarching controlled document of the EMS, which explains how the environmental programme operates in accordance with the Scheme and ISO 14001.

EMS Procedures
These are controlled documents describing how tasks are undertaken.

Procedure 3.5.1 Control of documents describes how EMS documents are classified and managed. It also explains how procedures are written, approved, revised and controlled.

The current version of all EMS procedures can be found in their respective folder in the document management system. All obsolete copies of procedures are archived by the EMS manager and held within the document management system. Obsolete EMS documents and records are kept for three years then destroyed.

The document management system is structured and numbered in line with the clauses of Scheme (fig. 3), making it particularly easy to find documents for internal and external auditing purposes.

Fig. 3: The structure of the document management system.

1. Planning
   1.1 General requirements.pdf

2. Implementing
   2.1 Legal & other requirements
      2.1.1 Legal & other requirements.pdf
2.2 Environmental aspects
   2.2.1 Environmental aspects.pdf

2.3 Objectives, targets & programmes
   2.3.1 Objectives, targets & programmes.pdf

2.4 Environmental policy
   2.4.1 Environmental policy.pdf

3. Operating

3.1 Resources, roles, responsibility & authority
   3.1.1 Resources, roles, responsibility & authority.pdf

3.2 Competence, training & awareness
   3.2.1 Competence, training & awareness.pdf

3.3 Communication
   3.3.1 Communication.pdf

3.4 Documentation
   3.4.1 Documentation.pdf

3.5 Control of documents
   3.5.1 Control of documents.pdf

3.6 Operational control

   3.6.1 Operational control.pdf
   3.6.2 Carbon Management Programme.pdf
   3.6.3 Management of Significant Construction and refurbishment Projects.pdf
   3.6.4 Waste Management and Recycling programme.pdf
   3.6.5 Promotion & Protection of Biodiversity.pdf
   3.6.6 Controlled Waste Management.pdf
   3.6.7 Disposal of Effluent.pdf
   3.6.8 Hazardous Waste Management.pdf
   3.6.9 Consumption of Water.pdf
   3.6.10 Noise and Nuisance Management.pdf
   3.6.11 Control of Pollution to Ground Water.pdf
   3.6.12 Control of Asbestos.pdf
   3.6.13 Control of Smoking on University Premises.pdf
   3.6.14 Fire Emergency Procedure.pdf
   3.6.15 Travel and Transport.pdf
   3.6.16 Futures Initiative.pdf
   3.6.18 Control of Purchasing.pdf
   3.6.19 Control of Parking.pdf
   3.6.20 Community Engagement.pdf WITHDRAWN
   3.6.21 Staff and Student Engagement.pdf
   3.6.22 Promoting Sustainable Food.pdf
   3.6.23 Use, storage and disposal of chemicals (Photography, Broadstairs)
   3.6.24 Use, storage of chemicals (Housekeeping)
   3.6.25 Management and use of fume cupboards
   3.6.26 Use & disposal of Refrigerant gases
   3.6.27 Hazardous waste – Disposal of chemicals
   3.6.28 Use, Storage and Disposal of Chemicals
   3.6.29 Use, Storage and Disposal of GM Materials
   3.6.30 Use, Storage and Disposal of Chemicals and other Hazard waste arising from research and teaching – School of Human and Life Sciences
   3.6.31 Use, storage & disposal of chemicals - Housekeeping
   3.6.32 Use, storage & disposal of chemicals – 21 New Dover Road
   3.6.33 Use, storage & disposal of chemicals – Augustine Arts
   3.6.34 Use, storage & disposal of chemicals - Animation
   3.6.35 Use, storage & disposal of chemicals & hazardous materials
3.6.36 Use, storage & disposal of chemicals and hazardous materials - Medway
3.6.37 Use, storage & disposal of chemicals and hazardous materials – Screen Printing, Broadstairs
3.6.38 Use, storage & disposal of chemicals and hazardous materials – Broadstairs

3.7 Emergency preparedness & response
3.7.1 Emergency preparedness & response.pdf

4. Checking & Correcting
4.1 Monitoring & measurement
   4.1.1 Monitoring & measurement.pdf
   4.1.2 Monitoring waste.pdf
   4.1.3 Monitoring energy, carbon & transport.pdf
   4.1.4 Monitoring other aspects.pdf
4.2 Evaluation of compliance
   4.2.1 Evaluation of compliance.pdf
4.3 Nonconformity, corrective action & preventive action
   4.3.1 Nonconformity, corrective action & preventive action.pdf
4.4 Control of records
   4.4.1 Control of records.pdf
4.5 Internal audit
   4.5.1 Internal audit.pdf
4.6 Management review
   4.6.1 Management review.pdf

5. EMS Manual
5.1.1 EMS Manual.pdf

Forms
Internal Audit Report form.doc
Corrective & Preventative Action Request form.doc
Corrective & Preventative Action Tracking Log form.doc
Operational Control Procedure form.doc
Audit Plan Notification.doc
Environmental procedure form.doc
Environmental Incident Report form.doc

Records
Aspects & impacts register
Objectives, targets & programmes
Legal register
Roles & responsibilities
Audit
Corrective actions
Management review
Communication
Training
Monitoring & measurement
Site Impact Plans
Emergency preparedness & response
Miscellaneous
Report
3.5 Control of documents

Procedure 3.5.1 Control of documents; describes how documents are created, controlled and located in order to effectively implement the institution’s Environmental Management System (EMS) and conform to the requirements of the scheme.

3.6 Operational control

Procedure 3.6.1 Operational control; describes how the organisation’s operations are controlled. Detailed operational procedures are used to ensure that all activities are correctly carried out and monitored. These documents are used to reduce the environmental impacts of all the processes associated with the organisation’s significant environmental aspects and to ensure compliance with relevant environmental legislation. All operational control procedures developed are located in folder 3.6 of the document management system.

3.6 Emergency preparedness and response

Procedure 3.7.1 Emergency preparedness and response; explains how the organisation prepares for and deals with environmental accidents and emergencies. It ensures that the response minimises the effects on the health of staff and the environment. The organisation reviews, revises and periodically tests this procedure and supporting documents.

4. CHECKING & CORRECTING

4.1 Monitoring and measurement

Procedure 4.1.1 Monitoring and measurement; outlines how the organisation monitors and measures processes that have a significant impact on the environment and are associated with the functioning of the EMS. Individual procedures are defined for monitoring Waste (4.1.2), Energy, Carbon and Transport (4.1.3) and Other Aspects (4.1.4). Each procedure outlines the location of associated monitoring records.

4.2 Evaluation of compliance

Procedure 4.2.1 Evaluation of compliance; details the methods used to ensure that all relevant people comply with applicable legal and other requirements.

4.3 Nonconformity, corrective action and preventive action

Procedure 4.3.1 Nonconformity, corrective action and preventive action; defines the responsibility and authority for investigating and remedying non-conformances. This procedure includes:
- Identification of the causes of the non-conformances.
- Analysis of the causes of the non-conformances to avoid any repetition.
- Actions to implement the necessary corrective actions.
- Assessment of the effectiveness of the corrective and preventive actions.
A blank Corrective and Preventative Action Request Form is stored in folder ‘Forms’ on the Document Management system and completed forms are stored in folder Records/Corrective actions in the document management system.

4.4 Control of records
Records are a fundamental part of the EMS. Procedure 4.4.1 Control of records; describes how they are created and controlled. All EMS system records are held in the document management system in folder Records in the document management system.

4.5 Internal audit
Audits are periodically conducted to assess the effectiveness of the EMS. Procedure 4.5.1 Internal audit explains:
- The clauses to be audited.
- The areas to be audited.
- The frequency of audits.
- The responsibilities associated with managing and directing audits.
- The training of internal auditors.
- The communication of audit results.
- The review of the audit findings.

Internal or external auditors carry out audits. All the audit records are stored in Records/Audit in the document management system.

4.6 Management review
Procedure 4.6.1 Management review; describes the method used by top management to review audit findings. Management reviews serve to maintain constant improvement and ensure the EMS is adequate and effective.

The Management Review Committee is chaired by Pro Vice Chancellor (Research & Knowledge Exchange). It reviews and assesses the EMS at least once a year with reference to audit results, changes in legislation and the views of interested parties. Minutes of these meetings are taken and circulated to members of the Management Review Committee. Copies of these minutes are filed in the document management system in folder Records/Management review.