

Environmental / Energy Management System (EMS / EnMS) - Documented Information Index

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Last Updated: July 2024

Version Control

| Date | Version | Purpose / Change | Author |
|------------|---------|------------------------------------|-------------|
| 18/05/2016 | 2 | | Matt Smith |
| 22/05/2017 | 3 | | Matt Smith |
| 30/05/2018 | 4 | | Katy Boom |
| 09/04/2019 | 5 | | Matt Smith |
| 24/05/2019 | 6 | | Katy Boom |
| 17/08/2020 | 7 | | Matt Smith |
| 21/01/2021 | 8 | | Matt Smith |
| 28/09/2021 | 9 | | Jess Tasney |
| 01/10/2022 | 10 | | Katy Boom |
| 25/09/2023 | 11 | | Jess Tasney |
| 22/07/2024 | 12 | Roles and responsibilities updated | Jess Tasney |

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1. Introduction

This document describes the processes implemented as part of the University of Worcester's (the University) Environmental Management System (EMS) and Energy Management System (EnMS) to ensure compliance with the requirements of the EcoCampus framework, ISO 14001:2014 and ISO 50001:2018. It also acts as an index for locating key documents associated with the EMS / EnMS.

The University has developed its EMS / EnMS to:

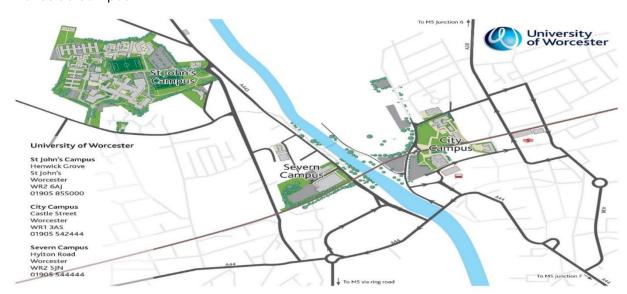
- Deliver systematic and continuous improvement of environmental and energy performance, and in so doing better protect the environment
- Identify and fulfil environmental and energy compliance requirements, including mandatory and voluntary requirements
- Build environmental and energy resilience across the University, ensuring that the University is resilient
 to external changes in the environment / energy, and that commitment to the environment and energy
 remains during periods of change at the University
- Ensure that top management remain informed and engaged with matters of the environment and energy at the University, and consider these in strategic planning

The intended outcomes of the EMS / EnMS are stated in the University's Sustainability Policy.

2. Scope of the EMS / EnMS

The University operates at the following sites:

- St John's Campus
- City Campus
- Severn Campus
- Lakeside Campus



The University is a small teaching University which is home to approximately 1,200 FTE staff members and between 8,000 and 9,000 FTE students. The University's built estate comprises of around 50 buildings, with 40% of these being used as residential buildings, and the remaining 60% being used as academic buildings.

The University's main activity is to provide academic facilities for students studying towards academic degrees. The University is also home to a smaller body of academic researchers and research facilities.

The University is made up of ten academic schools, each offering a range of teaching and research opportunities. These are:

- School of Allied Health and Community
- School of Arts
- Institute of Education
- School of Humanities
- School of Nursing and Midwifery
- School of Psychology
- School of Science and the Environment
- School of Sport and Exercise Science
- Worcester Business School
- Three Counties Medical School

To support the day-to-day running of the University and its academic activities, the University also consists of a range of professional services departments.

More information about the University can be found on the <u>University's webpages</u>.

The scope of the EMS / EnMS applies to the entire University estate and all its activities and operations. The EnMS gives special focus to the use of the natural gas and electricity (the University's two major fuel types) within this wider context. Across the baseline year 2018/19, the University consumed 15,157 MWh of energy, with natural gas accounting for 64% and electricity accounting for 36% of consumption.

3. EMS / EnMS Requirements

Bronze Phase (Planning)

1.1 Leadership and commitment

Top management has integrated environmental / energy management into the University's business processes and strategic direction. Management responsibilities and authorities are delivered via the reporting structure shown in Figure 1.

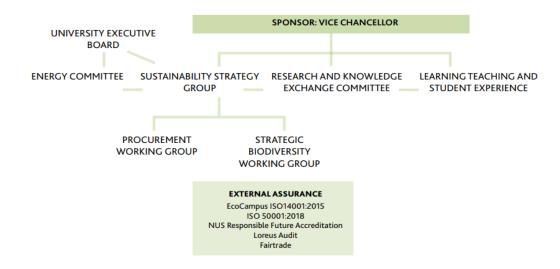


Figure 1 shows the governance and reporting structure for sustainability at the University.

Integration with business processes across the University is ensured through sponsorship by the Vice Chancellor, who is a member of the University Executive Board, and the sponsor for sustainability at the University.

The Sustainability Strategy Committee (SSC) is chaired by the Pro Vice Chancellor – Research and is responsible for providing strategic oversight of and direction for sustainability at the University. The Sustainability Strategy Committee is also the parent committee to the Sustainable Procurement Working Group and the Strategic Biodiversity Working Group.

The Energy Committee is chaired by the Pro Vice Chancellor – Finance and Resource and is responsible for providing strategic oversight of and direction for energy management at the University.

Curriculum and research matters are overseen by the Learning, Teaching, and Student Experience Committee, and the Research and Knowledge Exchange Committee respectively.

The annual management review is undertaken by the Sustainability Strategy Committee. The chairs of the Sustainability Strategy Committee and Energy Committee provide key environmental / energy updates to the University Executive Board and the Board of Governors (via the Audit Committee).

More information about environmental and energy leadership at the University can be found in procedure 1.1.1 Leadership and EMS / EnMS Scope.

1.2 Context of the University

External and internal environmental risks and opportunities that are relevant to the University have been determined. This includes environmental conditions capable of affecting the University, as well as the University's impact on the environment. Findings of this exercise have been collated in the PESTLE Analysis document.

The Log of Interested Parties outlines parties who have an interest in the University's ability to meet EMS objectives.

In addition, the Annual Sustainability Report takes accountability of the effectiveness of the environmental management system. This report is independently verified.

Silver Phase (Implementation)

2.1 Compliance requirements

Procedure 2.1.1 Compliance Requirements demonstrates how the University determines and accesses compliance requirements applicable to its environmental aspects. The procedure also highlights how the University considers compliance requirements when establishing, implementing, maintaining, and continually improving its EMS / EnMS.

Mandatory legal requirements

The EMS / EnMS Manager accesses the following resources for support with maintaining an understanding of compliance obligations:

- EcoCampus support
- Daily updates from the Department for Energy Security and Net Zero and the Department for Environment, Food, and Rural Affairs
- Regular updates from sector bodies (EAUC, AUDE, AUE)
- Regular updates from professional bodies (IEMA, CIBSE)

The EMS / EnMS Manager monitors changes in compliance obligations and updates the Compliance Register on an annual basis, or as and when changes are required.

Other compliance requirements

The University's Log of Interested Parties documents the needs and expectations of interested parties, which are considered compliance requirements.

2.2 Environmental aspects

Procedure 2.2.1 Environmental Aspects demonstrates how the University determines the environmental aspects of its activities and operations, whether these can be controlled or influenced, and their associated environmental impacts. The procedure also demonstrates how compliance requirements apply to environmental aspects, and how a life cycle perspective is considered when assessing the significance of aspects in terms of their impacts on the environment under a range of scenarios. Risks and opportunities associated with identified environmental aspects are also considered.

All environmental aspects and impacts are detailed and ranked in order of significance in the Aspects Register.

2.3 Planning action

The University has set environmental objectives and developed operational control processes to address its environmental aspects, compliance requirements, and risks and opportunities.

2.4 Environmental objectives

Procedure 2.4.1 Environmental Objectives describes how the University determines its environmental objectives, considering the University's significant environmental aspects and compliance obligations.

The EMS / EnMS Manager prepares six monthly progress reports. Annual progress reports are prepared during the management review process, and progress is indicated using a RAG rating system. During the management review process, the Sustainability Strategy Committee ensures objectives are consistent with the University's strategic direction.

Environmental objectives, key performance indicators, and actions to achieve objectives are detailed in the University's Annual Sustainability Report.

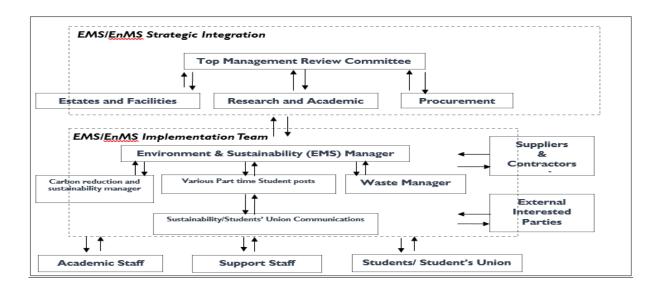
2.5 Sustainability Policy

Procedure 2.5.1 Sustainability Policy explains how the University's Sustainability Policy is written and revised.

Gold Phase (Operation)

3.1 Institutional roles, responsibilities, and authorities

Procedure 3.1.1 Institutional Roles, Responsibilities and Authorities explains how those involved in the EMS / EnMS are assigned roles, responsibilities, and authorities. The individuals and committees responsible for implementing the EMS / EnMS are shown below in Figure 2.



The reporting structure for implementing the EMS / EnMS shown above in Figure 2 highlights how Senior Management and the EMS / EnMS Implementation Team interact both internally and externally with interested parties and how information regarding the EMS / EnMS is integrated across the three relevant institutional functions - Estates and Facilities, the Research and Academic communities, and Procurement.

The details of the roles, responsibilities and authorities associated with the EMS / EnMS Reporting Structure are as follows:

Management Review Committee (Sustainability Strategy Committee):

- Prepare updates about key environmental issues for the University Executive Board,
- Determine the scope the EMS / EnMS; assess continuing suitability of the scope,
- Ensure the integration of the EMS / EnMS into the University's strategic planning and processes,
- Examine the EMS to ensure its continuing suitability and effectiveness,
- Where opportunities for improvement are identified, oversee delivery of these,
- Secure the resources required to maintain the EMS,
- Monitor the performance of the EMS / EnMS; review and revise key EMS / EnMS documentation including the University's Sustainability Policy and environmental and energy Objectives,
- Oversee work delivered by relevant subcommittees.

Energy Committee:

- Prepare updates about key energy issues for the University Executive Board,
- Examine the EnMS and its continuing suitability and effectiveness,
- Review outputs of the Energy Review process and use information to review energy objectives and supporting actions,
- Monitor energy consumption across the University's significant energy uses (building level); identify
 opportunities to reduce energy and decarbonise energy supplies especially via on-site generation,
- Take decisions re the University's approach to procurement of energy, including consideration of renewable tariffs, REGOs, power purchase agreements etc.
- Secure resources required to maintain the EnMS,
- Oversee development and delivery of the University's Energy Action Plan.

Core institutional functions (Estates and Facilities, Academic and Research Departments, Procurement):

• Ensure that the University's EMS / EnMS is considered during strategic decision making, in line with the Sustainability Strategy,

• Report to Senior Management periodically to ensure the EMS/EnMS is progressing as required to meet the University's environmental and energy objectives.

EMS / EnMS Manager:

- Member of the Sustainability Strategy Committee,
- Member of the Energy Committee,
- Member of Sustainable Procurement Working Group (subcommittee of the Sustainability Strategy Committee),
- Report to the Management Review Committee (Sustainability Strategy Committee) on the functioning of the EMS / EnMS,
- Lead implementation and development of the EMS / EnMS,
- Lead annual review of key EMS / EnMS documentation and procedures,
- Review and update the Compliance Register to ensure the University is up to date with relevant compliance requirements,
- Assign roles and responsibilities for environmental and energy management,
- Oversee the training of colleagues involved in the implementation of the EMS / EnMS; ensure that colleagues have adequate knowledge to execute their environmental responsibilities,
- Monitor and report on energy and carbon data / targets to the Energy Committee and Sustainability Strategy Committee,
- Lead development and review of targeted energy and carbon reduction strategies,
- Lead internal audits to ensure environmental compliance and effectiveness of EMS / EnMS, and train
 up a small team of internal auditors to support; coordinate external audits with a UKAS accredited
 certification body,
- Lead implementation of opportunities for improvement (where practicable), and rectification of nonconformities,
- Deliver EMS / EnMS training sessions to relevant colleagues,
- Communicates to interested parties about their EMS / EnMS obligations, including suppliers and contractors.

EMS / EnMS Implementation Team:

- Aid the EMS / EnMS Manager with the implementation and maintenance of the EMS / EnMS,
- Devise and promote initiatives to inform interested parties about the EMS / EnMS,
- Assist the EMS / EnMS Manager to conduct internal environmental and energy audits,
- Assist with the delivery of environmental training and general awareness raising,
- Ensure operational control processes are being adhered to,
- Conduct monitoring and measuring of environmental performance.

All staff:

• Are aware of the **Sustainability Policy**, environmental impacts associated with their area of work, their contribution to the EMS / EnMS and any implications of not conforming to compliance obligations.

Specific staff:

- Liaise with suppliers and contractors to ensure that they meet the University's environmental and energy requirements,
- Provide the EMS / EnMS Manager with appropriate operational control documented information,
- Know who to contact in the event of an environmental incident or emergency.

Students:

• Receive regular internal communications and have access to information about the University's environmental performance and initiatives.

Suppliers / contractors:

- Should satisfy the EMS / EnMS Manager that they are conforming to the University's relevant environmental processes,
- Provide the EMS / EnMS Manager with appropriate operational control documented information.

External interested parties:

- The needs and expectations of interested parties in relation to the EMS / EnMS are recorded in the Log
 of Interested Parties. In some instances, these relate to compliance obligations.
- The EMS / EnMS Manager is responsible to ensuring these needs and expectations are communicated and met.

For more information about EMS / EnMS roles and responsibilities, see the Roles and Responsibilities Register.

The EMS / EnMS Manager liaises with key personnel to agree a confirmed description of roles and responsibilities relating to the EMS / EnMS. Key personnel are asked to provide confirmation that they have agreed to the roles and responsibilities detailed in the Roles and Responsibilities Register. The EMS / EnMS Manager is responsible for collating and storing this information.

3.2 Competence and awareness

Procedure 3.2.1 Competence and Awareness describes how the University determines that people are competent in their roles, identifies training needs in relation to the EMS, and raises general environmental awareness.

The University uses external and internal training opportunities to boost environmental and energy competence and awareness across staff. General environmental awareness training aims to enhance the importance of an individual's behaviour in achieving the objectives and targets of the EMS / EnMS. Advanced training is for those whose work has or could have a significant impact on the environment.

Internal training opportunities include: Carbon Literacy training (offered to all staff and students) and environmental / energy roadshow sessions delivered by the EMS / EnMS Manager. External training opportunities include: training sessions with Loreus Ltd, LinkedIn Learning self-guided sessions, and EAUC / AUDE webinars and conferences.

Where more advanced environmental awareness training is required, specialist training sessions are organised, and resources shared. For example, all members of the Maintenance Team are required to participate in online COSHH training sessions annually.

The EMS Implementation Team is also trained in the delivery of internal environmental audits.

Environmental competence and awareness documents are detailed within the Roles and Responsibilities Register. All training records are held by relevant area managers.

3.3 Communication

The University uses procedure 3.3.1 Communication to ensure that internal and external communications, relating to the EMS / EnMS, are dealt with appropriately. The procedure describes how to receive, document, and respond to communications with interested parties.

3.4 Documentation

Procedure 3.4.1 Documented Information describes the process for creating, updating, and controlling EMS / EnMS documentation. This includes how EMS / EnMS documents are classified and managed, and how procedures are written, approved, revised, and controlled.

All documented information is stored in a document management system, currently hosted in OneDrive. Documentation is stored in accordance with the phases of the EcoCampus framework. Obsolete EMS / EnMS documents are kept for three years before being erased.

The document control system is structured and numbered in line with the clauses of the EcoCampus framework:

1. Planning

1.1

1.1.1 Leadership and EMS/EnMS Scope

2. Implementing

2.1

2.1.1 Compliance Obligations

2.2

2.2.1 Environmental Aspects

2.3

2.3.1 Environmental Objectives

2.4

2.4.1 Environment (Sustainability) Policy

3. Operating

3.1

3.1.1 Institutional Roles, Responsibilities & Authorities

3.2

3.2.1 Competence and Awareness

3.3

3.3.1 Internal & External Communication

3.4

3.4.1 Documented Information

3.5

3.5.1 Operational Planning & Control

3.6

3.6.1 Emergency Preparedness & Response

4. Checking & Correcting

4.1

4.1.1 Monitoring, Measuring, Analysis & Evaluation

4.2

4.2.1 Evaluation of compliance

4.3

4.3.1 Nonconformity & Corrective Action

4.4

4.4.1 Internal Audit

4.5

4.5.1 Management Review

5. Management System Index

5.1.1 Management System Index

6. Energy Management System

- **6.3** Energy Review an annual Energy Review is completed with the methodology and results outlines with in final report.
- **6.4** Energy performance indicators energy performance indicators are defined in the Energy & Water Management Strategy (EWMS) and reviewed annually in the Energy Review.
- **6.5** Energy baseline the Energy baseline is defined in the EWMS.
- **6.6** Planning for collection of energy data data collection outlined in operational procedure Energy and Waster operation procedure.

3.5 Operational control

Procedure 3.5.1 Operational Control describes how the environmental impacts of the University's operations are identified and 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.

3.6 Emergency preparedness and response

Procedure 3.6.1 Emergency Preparedness and Response explains how the University prepares for and responds to environmental emergency situations. It ensures that actions are planned to prevent and mitigate adverse environment impacts. The University reviews, revises, and periodically tests this procedure and supporting documented information.

The **Environmental Incident Report Form** for recording accident and emergencies is located online via the SharePoint.

Platinum Phase (Checking and Correcting)

4.1 Monitoring, measuring, analysis, and evaluation

Procedure 4.1.1 Monitoring, Measuring, Analysis, and Evaluation outlines how the University monitors, measures, and evaluates its environmental performance and the effectiveness of the EMS / EnMS, including setting environmental and energy performance criteria and indicators.

4.2 Evaluation of compliance

Procedure 4.2.1 Evaluation of Compliance details the methods used to ensure the University meets its compliance requirements. This includes:

Determining the frequency that compliance will be evaluated,

- Evaluating compliance and acting to boost compliance where needed,
- Maintaining knowledge of compliance requirements.

4.3 Nonconformity and corrective action

Procedure 4.3.1 Nonconformity and Corrective Action defines the responsibility and authority for investigating and addressing nonconformances.

This process includes:

- Identification of the causes of the nonconformances,
- Root cause analysis of the causes of the nonconformances to avoid any repetition,
- Actions to implement the necessary corrective actions,
- Assessment of the effectiveness of the corrective actions.

Each time a nonconformance is identified, the EMS / EnMS Manager records this on the Log of Nonconformances and raises a corrective action record which is then shared with the nonconformance owner.

4.4 Internal audit

Audits are periodically conducted to assess the effectiveness of the EMS / EnMS. Procedure 4.4.1 Internal Audit describes:

- 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 via the management review process

A team of internal auditors is coordinated by the EMS / EnMS Manager to carry out a programme of internal audits.

4.5 Management review

Procedure 4.5.1 Management Review describes the method used by the Sustainability Strategy Committee to review the continuing suitability, adequacy, and effectiveness of the EMS / EnMS. The review considers a range of information, including audit results, progress towards environmental objectives, changes to compliance requirements and the needs and expectations of interested parties.

The Sustainability Strategy Committee completes a management review exercise at least annually. The management review is minuted to record all outputs and conclusions regarding the review of the EMS / EnMS.