



GREEN DRAGON ENVIRONMENTAL STANDARD 2016®



- Requirements for use

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Green Dragon Environmental Standard®

Safon Amgylcheddol Y Ddraig Werdd®

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INTRODUCTION & GENERAL REQUIREMENTS

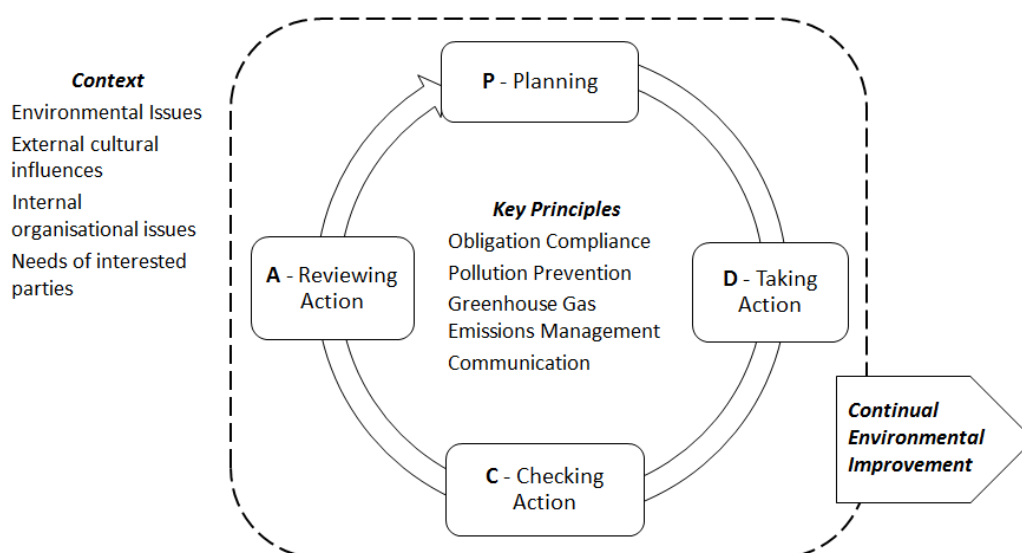
The Green Dragon Environmental Standard® is intended to provide organisations with:

- the elements of an effective environmental management system that are appropriate to the context, nature and scale of their activities and operations;
- a system to reduce the organisations environmental impacts and protect the environment, including minimising ecosystem degradation, climate change, loss of biodiversity, pollution, use of finite resources, waste management;
- an implementation tool for achieving ISO14001:2015, the EC Eco-Management and Audit Scheme (EMAS) and BS8555:2016. (Where an organisation wishes to achieve any of these standards, it is strongly recommended that copies of these standards are obtained in addition to the Green Dragon Environmental Standard®).

The Green Dragon Environmental Standard® incorporates the following key principles of Environmental Management:

- Continual Environmental Improvement;
- Meeting Compliance Obligations;
- Protection of the Environment;
- Greenhouse Gas Emissions Management;
- Communication of Environmental Issues;
- Environmental Management System Elements.

Figure 1 - Key principles and elements of the Green Dragon Environmental Standard® and integration with the PDCA model



There are five Levels within the Green Dragon Environmental Standard®, each incorporating the key elements of:

- Planning;
- Taking Action;
- Checking Progress;
- Reviewing Achievements;

To realise continual environmental improvement.

This document sets out the minimum requirements for achieving each Level of the Green Dragon Environmental Standard®.

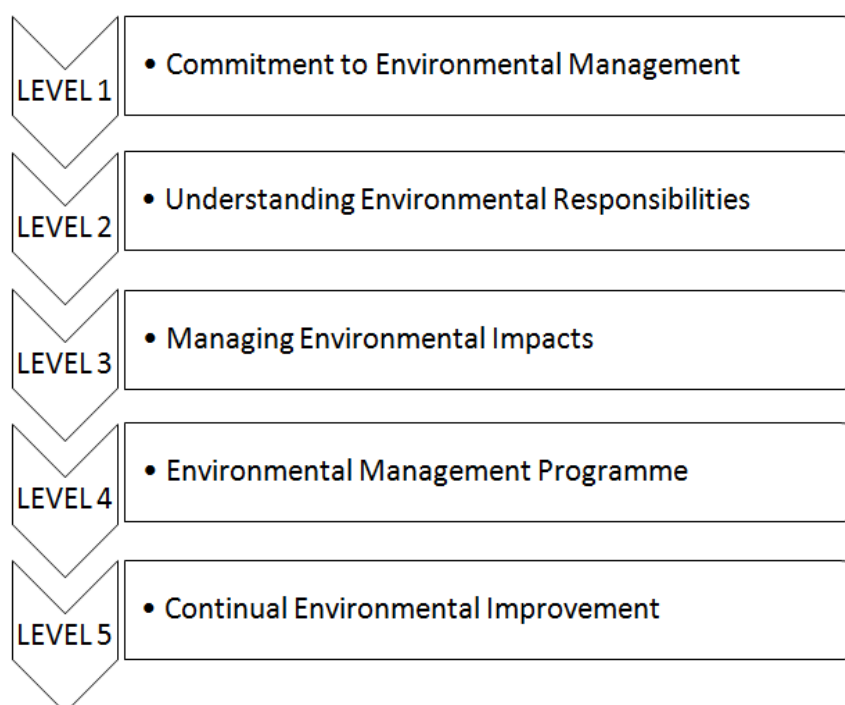
Organisations achieving:

- Levels 1-5 shall receive a Certificate stating the Level achieved, date of expiry and certificate number;
- Levels 2-5 will be entitled to use the Green Dragon Logo on their corporate literature, providing they have a valid certificate;
- Levels 3-5 are eligible to purchase the Green Dragon Environmental Standard® Plaque.

All certified organisations shall feature in a Register on the Green Dragon Environmental Standard® website (www.greendragonems.com).

Registered organisations shall be subject to periodic audits by Green Dragon Environmental Standard® assessment bodies.

Figure 2 - The Five Levels of the Green Dragon Environmental Standard®



KEY PRINCIPLES

In developing Environmental Management Systems, organisations shall apply the Key Principles of:

A. Continual Environmental Improvement

- i The organisation shall demonstrate environmental improvements on an ongoing basis.
- ii During a re-assessment, failure to effectively demonstrate Continual Environmental Improvement committed to within the Improvement Plan or Objectives and Targets shall result in suspension or revocation of the Green Dragon Environmental Standard® registration.
- iii Allowance shall be made for micro enterprises and those organisations with very low environmental impacts when continual improvement is considered in the assessment process.

B. Compliance with Obligations

- i Compliance with relevant environmental legislation and other voluntary obligations to which the organisation subscribes at the time of assessment shall be a minimum requirement for achievement of any Level of the Green Dragon Environmental Standard®.
- ii Legislative non-compliance at any time that results in the service of a summons for prosecution, the service of an enforcement notice or the service of an abatement notice under UK environmental legislation, may result in suspension or revocation of Green Dragon Environmental Standard® registration.

NB: Achieving Green Dragon registration does not guarantee full environmental legal compliance. Inspected organisations are solely responsible for checking and ensuring their compliance at all times.

C. Protection of the Environment

- i The organisation shall commit to protecting the natural environment from damage and degradation from its services, products and activities.
- ii Commitments made shall relate to the context the organisation operates in, including local, regional or global environmental conditions. Issues addressed may include pollution impacting on air, water and ground quality, biodiversity, climate change impacts, waste management and recycling, ecosystems mitigation and restoration following incidents.
- iii Pollution incidents shall be reported to the Green Dragon Environmental Standard Administrator. The principal Green Dragon Assessor shall assess the scale of incident, actual damage or risk to the environment and causes of the incident to determine whether suspension of the Green Dragon registration is appropriate. Where a certificate is withdrawn, reissue shall only occur following the successful completion of an on-site re-assessment.
- iv If a Green Dragon Registered Assessor deems at any time that pollution risks are not

adequately controlled, registration shall be withheld or withdrawn pending a successful on-site re-assessment.

D. Greenhouse Gas Emissions Management

- i The organisation shall identify Greenhouse Gas Emissions (Scope 1, 2 and 3) and Objectives and Targets relating to their activities, processes and services according to the Green Dragon Level requirements.
- ii Greenhouse Gas Emissions shall be managed in accordance with applicable compliance obligations and improvement actions established as part of organisation's commitment to continual environmental improvement.
- iii Greenhouse Gas emissions monitoring data will be verified during the auditing process.

E. Communication of Environmental Issues

- i The organisation shall ensure that its staff, contractors, suppliers and other interested parties are informed of its Environmental Policy and procedures as appropriate and shall publicly report its environmental commitments at all Levels of the Green Dragon Environmental Standard®.
- ii At Level 3 and above, the organisation shall publicly report on its environmental performance.

F. Environmental Management System Elements

- i In achieving the key principles listed above, organisations shall implement the key elements of:

- ✓ Planning
- ✓ Taking Action
- ✓ Checking Progress, and
- ✓ Reviewing Achievements

at all Levels of the Green Dragon Environmental Standard®.

- ii The Environmental Management System shall be sufficiently documented and periodically reviewed to ensure no deviations from the commitments made in the Environmental Policy.
- iii The Environmental Management System, its elements and measures shall be appropriate to the nature and scale of the organisation.
- iv In order to achieve any Level of the Green Dragon Environmental Standard®, an organisation shall achieve the requirements for that Level as well as the applicable requirements for any previous Level(s).

LEVEL 1 - COMMITMENT TO ENVIRONMENTAL MANAGEMENT

A. Responsibility and Resources

- i Senior management shall commit the organisation to addressing its impacts on the environment, to continual environmental improvement and to implementing an Environmental Management System (EMS).
- ii Overall responsibility and accountability for the Environmental Management System and related issues shall rest with senior management.
- iii Senior management shall ensure that support, direction and resources are provided to staff to permit the effective implementation, operation and integration of the Environmental Management System within all of the organisation's business processes.
- iv Senior management shall communicate the importance of conforming to Environmental Management System requirements and effective environmental management.
- v Senior management shall assign responsibility for environmental management to competent persons within the organisation. Their responsibilities shall include:
 - a) implementing and maintaining the Environmental Management System;
 - b) ensuring that the Environmental Management System is integrated across all of the organisation's activities;
 - c) keeping the Environmental Policy up to date;
 - d) co-ordinating environmental objectives, targets and improvements;
 - e) monitoring environmental performance and competence;
 - f) communicating on all environmental issues, both internal and external;
 - g) keeping staff aware of environmental responsibilities, commitments, roles, authorities and environmental performance;
 - h) reporting to senior management on the organisation's environmental performance and the effectiveness of its Environmental Management System.
- vi Senior management shall commit to a full review of the Environmental Management System. The review will be conducted at least annually or following a significant change or non-conformance within the organisation.
- vii Senior management shall demonstrate their commitment to the Environmental Management System to a Green Dragon Assessor during both initial and re-assessments of the EMS.

B. Environmental Review

- i An Initial Environmental Review shall be carried out, taking into account the context within which the organisation operates, defined scope and boundaries, related risks and opportunities and a life cycle approach. The review shall include:

- a) identification of environmental conditions, such as climate change, biodiversity, natural resources, contamination, air and water quality and land use affected by the organisations activities;
 - b) identification of external cultural issues, such as legal and regulatory, economic, competition, technological, social and political issues, and administrative (local, regional, national and international) issues;
 - c) identification of those internal activities, products, services, strategic direction and capabilities that have or could have an impact on the environment;
 - d) collation of available environmental data, evaluation of current environmental competence and performance, and;
 - e) the defined scope and boundaries of the Environmental Management System. The scope of the EMS shall be made available to interested parties.
- ii Where relevant, the Review shall include consideration of the following issues:
- a) the organisation's nature, scale and activities;
 - b) products, processes and services of the organisation;
 - c) environmental awareness and training needs;
 - d) existing environmental management practices;
 - e) relevant environmental compliance obligations (mandatory or voluntary) affecting the activities, products and services of the organisation;
 - f) historic, current and proposed site activities, products and services;
 - g) buildings, infrastructure and surrounding physical environment;
 - h) land contamination;
 - i) pollution risk assessment;
 - j) use of natural resources and raw materials;
 - k) energy consumption and efficiency;
 - l) water consumption, use and discharge;
 - m) emissions to atmosphere;
 - n) climate change;
 - o) resource management;
 - p) packaging;
 - q) transport and logistics;
 - r) unusual and emergency situations;
 - s) ancillary activities;
 - t) environmental performance and practices of contractors, subcontractors and suppliers;
 - u) other management or quality standards;
 - v) landscaping and aesthetics;
 - w) biodiversity;
 - x) the needs and expectations of interested parties (e.g. general public, regulators,

- business and community partners / stakeholders);
 - y) other relevant environmental issues such as noise, odour, particulates or nuisance.
- iii The information gathered as part of the Environmental Review shall be;
 - a) documented and auditable;
 - b) used to develop the Environmental Management System including the Environmental Policy, Objectives and Targets, Register of Compliance Obligations, Aspects Register, Emergency Preparedness Plan, process controls and other documents required by the Green Dragon Standard, and;
 - c) used to develop actions to ensure the Environmental Management System provides a framework to protect the environment and achieve its intended outcomes in relation to addressing risks and opportunities, continual environmental improvement, control of significant environmental aspects, meeting compliance obligations, and integration with other business processes.
- iv All elements of the Environmental Management System developed following completion of the Initial Environmental Review shall be reviewed, revised and updated (where appropriate) at periodic intervals to reflect any changes to the organisation's context, activities, products, processes and services.

C. Environmental Policy

- i The organisation's senior management shall develop a specific Environmental Policy taking into account:
 - a) information obtained during the initial Environmental Review and subsequent revisions to the Environmental Management System;
 - b) operational requirements of the organisation;
 - c) views of staff and other interested parties;
 - d) the scope of the Environmental Management System as defined in the Environmental Review;
 - e) the context, nature, scale and environmental impacts of its activities, products, services and strategic direction.
- ii The organisation shall ensure that the Policy:
 - a) contains a brief description of the organisation's activities;
 - b) addresses its key environmental impacts;
 - c) contains a commitment to protection of the environment, including pollution prevention and other environmental issues relating to the organisation's operating context;
 - d) contains a commitment to continual improvement of environmental management and performance;
 - e) contains a commitment to meet all compliance obligations relating to its Environmental Aspects;
 - f) acts as the governing document for setting improvements within the Improvement

Plan or Objectives and Targets;

- g) contains one or more specific improvement objectives;
 - h) states the date that the policy was last approved, authorised and signed by a senior manager,
 - i) includes appropriate document control references,
 - j) is communicated to all persons working for or on behalf of the organisation;
 - k) is publicly available;
 - l) is reviewed at least annually and revised as necessary.
- iii The Environmental Policy shall be supplied for publication on the Green Dragon Environmental Standard® website: www.greendragonems.com .

D. Environmental Monitoring¹

- i The organisation shall establish a procedure to identify, monitor and maintain documented data (where practicable) on environmental performance indicators. Key indicators may include but not be limited to:
- a) energy consumption;
 - b) water consumption;
- (Where possible and relevant, data from a) and b) shall be taken from actual meter readings)
- c) waste production;
 - d) water discharge;
 - e) use of transport;
 - f) compliance obligations.
- ii The frequency of monitoring shall be determined by the nature, scale and operations of the organisation, and to ensure compliance with commitments made within the Environmental Policy.
- iii The selected indicators shall be:
- a) appropriate to the nature and scale of the organisation;
 - b) used to ensure compliance obligations are met, maintain adherence to the commitments of the Environmental Policy, assess progress against objectives and targets and drive continual improvement.
- iv The organisation shall make available at the time of re-assessment, all data collected on environmental indicators, along with information about other qualitative and quantitative improvements².

¹ Monitoring Key Environmental Performance Indicators at Level 3 (Section G) builds upon the Environmental Monitoring developed at Level 1 D.

² Environmental indicator data shall be recorded using Re-Assessment Data Sheet included as part of the Green Dragon application process.

E. Improvement Plan³.

- i A Plan to improve the organisation's environmental management and performance shall be produced. This shall contain information obtained through the Environmental Review process and demonstrate Environmental Policy commitments to continual environmental improvement.
- ii The Improvement Plan shall state:
 - a) specific objectives that;
 - address the key environmental impacts of the organisation,
 - are realistic and appropriate to the nature and scale of the organisation activities,
 - are measurable where possible.
 - b) timeframes and milestones for achievement of the stated objectives;
 - c) activities and training required to implement the objectives effectively, as identified within the Environmental Review;
 - d) assigned responsibilities for achieving the objectives.
- iii The Improvement Plan shall be documented, dated and authorised by a senior manager, and communicated to all employees.
- iv Progress towards the achievement of objectives shall be monitored to evaluate the effectiveness of improvement activities.
- v Where necessary, actions shall be taken to address any problems identified.
- vi The Improvement Plan shall be reviewed and amended as necessary to reflect the progress towards the achievement of objectives and to reflect any changes to the activities, products and services of the organisation or its environmental impacts.
- vii Environmental improvement shall be a continual process, and this shall be reflected within the Improvement Plan through the addition of new objectives when appropriate.

³ The Improvement Plan is replaced by Objectives and Targets at Level 3 (Section E).

LEVEL 2 - UNDERSTANDING ENVIRONMENTAL RESPONSIBILITIES

A. Register of Compliance Obligations

- i The organisation shall identify and document within a Register, all applicable environmental legislation, regulatory requirements and other voluntary commitments that relate to the environmental aspects of its activities, products and services that it has to or chooses to comply with.
- ii The organisation shall:
 - a) identify all applicable environmental legislation;
 - b) identify all voluntary commitments;
 - c) document and demonstrate clear understanding of the requirements of the legislation, regulations and voluntary commitments as they relate to the organisation⁴;
 - d) ensure that the implications of compliance with all identified Acts, Regulations, Orders and voluntary commitments are considered when operating the Environmental Management System;
 - e) designate responsibility for the maintenance of the Register;
 - f) identify methods to ensure the Register remains up to date;
 - g) review the Register, at least annually, and amend as necessary;
 - h) ensure that the Register is dated, authorised and referenced appropriately.

B. Managing Compliance Obligations

- i Actions and procedures to ensure conformance with compliance obligations shall be planned, documented and demonstrated.
- ii Compliance obligations shall be communicated to all relevant persons, with clear and precise guidelines to ensure ongoing conformance with requirements.
- iii Periodic, recorded checks shall be carried out to monitor conformance with compliance obligation requirements. The frequency of compliance checks shall be determined by the organisation.
- iv Where compliance problems are identified, action shall be taken to correct these problems and maintain compliance.
- v The organisation shall obtain all documents required to demonstrate conformance with compliance obligations and retain them for the designated period.
- vi The Green Dragon Environmental Standard Administrator shall be contacted as soon as possible following a legislative non-compliance that results in the service of a summons for prosecution, an enforcement notice or an abatement notice under environmental

⁴ At Level 3, these shall relate to the Environmental Aspects of the organisation.

legislation.

C. Emergency Preparedness⁵

- i The organisation shall identify emergency situations and their potential environmental consequences.
- ii The organisation shall establish procedures to avoid or control identified emergency situations and their potential environmental consequences.

D. Internal Communication and Competence

- i Roles, responsibilities and authorities for operation of the Environmental Management System, including key environmental impacts and relevant compliance obligations, shall be communicated to all levels and functions of the organisation.
- ii The organisation shall ensure that persons performing activities that could have a significant impact on the environment are competent and aware of and understand:
 - a) their roles and responsibilities in protecting the environment and preventing pollution;
 - b) the importance of conformity with the Environmental Policy and procedures.
- iii Appropriate documentation will be retained by the organisation to demonstrate competence.
- iv The organisation shall communicate internally on environmental issues taking into account compliance obligations and applicable information retained within the Environmental Management System.
- v The organisation shall ensure that persons working for, or on behalf of the organisation are involved in the process of continually improving its environmental performance.
- vi Appropriate information shall be retained to demonstrate internal communication.

E. Non-conformance and corrective action

- i Where problems or non-conformances are identified, the organisation shall allocate responsibilities and develop corrective actions to correct them. Corrective actions and timescales for their implementation shall be appropriate to:
 - a) the scale of the problem;
 - b) its impacts on the environment;
 - c) the resources available to correct the problem.
- ii Where environmental problems or non-conformances are identified within the organisation or the Environmental Management System, the organisation shall:

⁵ At Level 3 Section D this will evolve into the Pollution Prevention Plan.

- a) Remediate any environmental damage.
 - b) Investigate the cause and whether similar or potential issues may exist elsewhere.
 - c) Review and evaluate the effectiveness of problem identification and corrective actions implemented.
 - d) Where appropriate make changes to the Environmental Management System to ensure similar situations do not reoccur.
- iii The organisation shall encourage the reporting of existing and potential environmental problems or non-conformances within the Environmental Management System.
- iv Documented information shall be retained by the organisation to record evidence of non-conformance identification, corrective action taken and the effectiveness of corrective action.

F. Environmental Records⁶

- i The organisation shall ensure that sufficient documentation exists and key documents and records are retained and maintained to:
- a) enable the effective functioning of the Environmental Management System;
 - b) meet compliance obligations.
- ii Procedures shall be established to identify, maintain and dispose of documents and records.
- iii Environmental documents and records shall be:
- a) legible;
 - b) identifiable, accessible and traceable;
 - c) stored in a safe and secure place;
 - d) maintained and retained.

⁶ This is further formalised at Level 4 Section C Control of Documents.

LEVEL 3 - MANAGING ENVIRONMENTAL IMPACTS

A. Environmental Aspects Register

- i The organisation shall establish, implement and maintain a documented Environmental Aspects Register, identifying those Aspects of its activities, products and services from which Environmental Impacts could or do arise.
- ii In establishing this Register, the organisation shall take into account the information collected as part of the Environmental Review, risks and opportunities, and the Register of Compliance Obligations.
- iii The Environmental Aspects Register shall:
 - a) list all the organisation's Environmental Aspects and their associated Environmental Impacts;
 - b) identify those Aspects which the organisation can directly control as well as those it can indirectly influence, considering a life cycle approach;
 - c) take into account normal, abnormal and emergency situations;
 - d) take into account historic, current and proposed developments, activities, products and services;
 - e) take account of both positive and negative environmental impacts;
 - f) be reviewed at least annually, or when changes to any activities products and services occur, and amended as necessary;
 - g) be authorised by an appropriate member of staff.
- iv A procedure detailing how the Aspects Register is compiled and reviewed shall be documented.

B. Evaluation of Environmental Aspects

- i The organisation shall develop a documented methodology to evaluate the significance of its Environmental Aspects, both Direct and Indirect, and associated Environmental Impacts.
- ii The evaluation method shall include consideration of environmental impacts (for example pollution risks), compliance obligations and the views of interested parties.
- iii The evaluation method shall be clear, understandable and reproducible.
- iv Both Direct and Indirect Aspects shall be assessed against the evaluation method and the results of the assessment shall be recorded.
- v The organisation shall automatically award a high level of significance to Environmental Aspects:
 - a) affected by environmental compliance obligations (both mandatory and voluntary);
 - b) posing an actual or potential significant environmental impact, such as environmental pollution;

- c) where insufficient data or information is available.
- vi The significance of Environmental Aspects shall be evaluated at least annually and following notable changes to:
 - a) identified Environmental Aspects and Impacts;
 - b) the organisation, activities, products and services;
 - c) compliance obligations.
- vii The evaluation method shall be reviewed at least annually to ensure it remains appropriate; amendments shall be made as necessary.
- viii Evaluated environmental aspects shall be authorised by an appropriate member of staff and include appropriate document control.
- ix Significant environmental aspects shall be communicated to appropriate levels and/or functions across the organisation.

C. Control of Environmental Aspects

- i The organisation shall implement control measures to manage those Aspects that have or could have a significant impact on the environment, as identified within the Environmental Aspects Register and consistent with a life cycle approach.
- ii Control measures shall be communicated to all relevant persons.
- iii Control measures shall be documented where their absence may lead to deviation from the planned outcome, the Environmental Policy or Objectives and Targets.

D. Pollution Prevention Plan⁷

- i Taking account of Emergency Preparedness procedures and the Environmental Aspects Register, the organisation shall identify those activities and situations that pose a potential risk of environmental pollution.
- ii A documented Pollution Prevention Plan shall be developed to:
 - a) minimise the environmental risks,
 - b) provide an effective response to any potential incident.
- iii The Pollution Prevention Plan shall:
 - a) describe pollution risks and proposed measures to prevent pollution incidents;
 - b) describe the proposed measures to mitigate Environmental Impacts resulting from pollution incidents;
 - c) be reviewed at least annually and following any pollution incident to ensure it remains appropriate and effective, and amended as necessary.
- iv The organisation shall ensure that the measures defined in the Pollution Prevention Plan are communicated to all relevant persons and implemented effectively.

⁷ The Pollution Prevention Plan expands and replaces the Emergency Preparedness measures (Level 2 Section C).

- v The organisation shall monitor, test (where appropriate) and periodically review the effectiveness of pollution prevention measures and record the results of this monitoring.
- vi The organisation shall record any pollution incidents that caused or could have caused environmental harm.
- vii Where necessary, actions shall be taken to address any problems identified.
- viii The results of preventative and corrective actions shall be recorded and reviewed to ascertain their effectiveness and the Pollution Prevention Plan shall be amended as necessary.
- ix The Pollution Prevention Plan shall be authorised by an appropriate member of staff and include appropriate document control.

E. Objectives and Targets⁸

- i Environmental improvement Objectives and Targets shall prioritise Significant Environmental Aspects or areas for improvement over which the organisation can exercise control or influence and integrate into business processes.
- ii In setting Objectives and Targets, the organisation shall take into account:
 - a) Environmental Policy commitments;
 - b) significant environmental aspects;
 - c) risks and opportunities;
 - d) views of staff and interested parties;
 - e) compliance obligations;
 - f) appropriate technologies and Best Available Techniques;
 - g) economic, organisational and business commitments.
- iii Objectives and Targets shall be:
 - a) documented;
 - b) realistic and appropriate to the nature and scale of the organisation;
 - c) measurable where possible and auditable at all times;
 - d) signed, dated and approved by a senior member of staff;
 - e) communicated to all employees and made available to all interested parties.
- iv The organisation shall develop an Action Plan that:
 - a) allocates responsibilities, resources and timescales (start and completion date) for achieving the Objectives and Targets;
 - b) specifies actions needed to achieve the Objectives and Targets;
 - c) specifies the monitoring criteria and evaluation indicators for assessing progress toward achieving Objectives and Targets.
- v The Objectives and Targets and Action Plan (identification, planning and delivery) shall be

⁸ Objectives and Targets replace the Improvement Plan at Level 1 Section E.

reviewed and amended as necessary to reflect changes within the Environmental Management System and/or achievements made in line with the goal of Continual Environmental Improvement.

F. Addressing Sustainability

- i The organisation shall demonstrate a continual commitment to Sustainability by implementing at least one auditable Objective and Target pursuing economic and /or social improvement within the framework of Sustainable Development.
- ii The Sustainability Objective(s) and Target(s) shall be incorporated within the overall Objectives and Targets as required within Level 3(E) and managed accordingly.

G. Monitoring Key Environmental Performance Indicators

- i The organisation shall allocate responsibilities and resources for monitoring Key Environmental Performance Indicators⁹ which may relate to:
 - a) total annual consumption/flow in the key environmental areas of energy and material efficiency, waste, water, emissions and biodiversity;
 - b) significant environmental aspects;
 - c) progress towards achieving Objectives and Targets;
 - d) operational controls;
 - e) the effectiveness of pollution prevention measures.
- ii Key environmental performance indicators may link annual input/impact to output of the organisation. For example:
 - a) number of employees;
 - b) turnover (£);
 - c) floor area (m³);
 - d) units of output (tonnes, kg, items).
- iii All indicators, measures and records shall be clear, meaningful and easy to understand and benchmark.
- iv The results of all monitoring and measuring activities shall be recorded and periodically reviewed to determine the effectiveness of improvement and environmental protection measures.
- v Where relevant, monitoring and measuring equipment shall be calibrated and maintained and records of this process shall be retained.
- vi Where necessary, action shall be taken to rectify any problems that are highlighted as a result of the monitoring activities.
- vii Key environmental performance indicators shall be included within the Environmental

⁹ Indicators build upon Level 1 D Environmental Monitoring.

Statement (or Report).

H. Greenhouse Gas Emissions Data Collection (Scope 1 & 2)¹⁰

- i The organisation shall calculate the annual quantities of applicable direct Greenhouse Gas emissions¹¹ resulting from activities owned by or under its control, known as Scope 1 emission, released through the following activities:
 - a) fuel (gas, coal, LPG) combustion e.g. boilers, turbines or furnaces;
 - b) owned transport e.g. cars, lorries, ships and airplanes;
 - c) physical and chemical processes other than fuel combustion process emissions e.g. manufacturing of cement, aluminium, ammonia and treatment of waste;
 - d) uncontrolled fugitive emissions that do not pass through stacks, chimneys or vent emissions e.g. refrigeration and air conditioning leaks, methane leaks from pipelines.
- ii The organisation shall calculate the annual quantities of applicable indirect Greenhouse Gas emissions resulting from consumption of purchased electricity, heat or steam, known as Scope 2 emissions.
- iii The organisation shall record these quantities annually, be endorsed by senior management, and published as part of the organisation's Environmental Statement (or Report).

I. Environmental Statement¹²

- i The organisation shall produce an annual Environmental Statement describing:
 - a) the nature and scale of the organisation's activities;
 - b) its current environmental priorities, including its Objectives and Targets;
 - c) its key environmental performance indicators over the past year;
 - d) Greenhouse Gas emissions as calculated in Level 3(H).
- ii The Environmental Statement shall provide information on the achievement of other environmental objectives to which the organisation has committed itself.
- iii The Environmental Statement shall be endorsed by senior management.
- iv The Environmental Statement shall be validated as part of the Green Dragon audit by a Registered Assessor during both initial and re-assessments of the Standard. The Environmental Statement shall document:
 - a) That the Environmental Statement has been externally verified as part of the Green Dragon audit;
 - b) The name and contact details of the Registered Assessor and auditing organisation;
 - c) The date of Environmental Statement validation and expiry.

¹⁰ Greenhouse gas emissions are grouped into three 'scopes' by the widely-used international accounting tool, the Greenhouse Gas (GHG) Protocol. Also see Level 5.

¹¹ CO₂ emissions may be calculated using the tables and conversion factors contained in the Green Dragon Guidance for Implementers and Assessors.

¹² Replaced by the Environmental Report at Level 5.

- v The Environmental Statement shall be made available to other interested parties and made publically available, for example where practicable on the organisation's website or provided on request to interested parties.
- vi The Environmental Statement shall be supplied for publication on the Green Dragon Environmental Standard® website: www.greendragonems.com .

J. External Communication

- i External and internal communication procedures shall be documented including what information is to be communicated, when, to whom and the means of communication.
- ii The organisation shall establish responsibilities for:
 - a) external communication relevant to the Environmental Management System with external interested parties on environmental issues and compliance obligations;
 - b) responding to external communication;
 - c) communicating relevant environmental requirements with suppliers and contractors.
- iii All staff shall be informed of the responsibilities and procedures for external environmental communications.
- iv Where appropriate, details of communication shall be recorded and retained.

LEVEL 4 - ENVIRONMENTAL MANAGEMENT PROGRAMME

A. Training

- i The organisation shall assess training needs related to identified Environmental Aspects, Environmental Management System requirements and commitments made within the Environmental Policy.
- ii The organisation shall assess the competency and awareness needs of all those persons whose work may impact on the organisations environmental performance.
- iii The organisation shall establish a training procedure to ensure that all persons working for or on behalf of the organisation are aware of and understand:
 - a) the management structure and responsibilities for environmental matters;
 - b) key environmental issues relating to the organisation's activities, products and services;
 - c) the Environmental Policy;
 - d) the organisation's Significant Environmental Aspects and associated Impacts;
 - e) the organisation's Objectives and Targets;
 - f) environmental compliance obligations (where directly applicable to a person's normal working role);
 - g) their own role and responsibilities within the Environmental Management System;
 - h) the consequences of deviating from the organisation's Environmental Policy commitments and procedures.
- iv Further training shall be carried out to ensure the ongoing competency of those individuals working for or on behalf of the organisation and whose actions control or contribute toward activities that have an actual or potential significant impact on the environment.
- v Adequate resources shall be made available to ensure that, where training needs are identified, adequate training is carried out.
- vi Training records shall be maintained.

B. Environmental Management System and Manual

- i The organisation shall develop, maintain, implement and continually improve an Environmental Management System to provide a framework for protecting the environment, enhancing its environmental performance and ensuring the intended outcomes are met.
- ii The organisation shall compile an Environmental Manual that briefly describes all the key elements and documents of the organisation's Environmental Management System required by the Green Dragon Standard to:
 - a) describe the scope of the Environmental Management System;

- b) act as a signpost and guide to all parts of the Environmental Management System;
 - c) ensure the effective implementation of the Environmental Policy and Objectives and targets;
 - d) reference other documented information not created as part of the Environmental Management System but impacting on the environmental performance of the organisation.
- iii Documented information within the Environmental Manual will be dependent on the nature, scale and activities of the organisations processes, and the competency of the staff.
- iv Management system procedures documented as part of other business processes may be integrated within the Environmental Management System.

C. Control of Documents¹³

- i The organisation shall establish a procedure to ensure that maintained documents and retained records (both internal and external) relating to the Environmental Management System are controlled, so that correct and relevant information can be readily accessed by personnel to support the effective operation of the Environmental Management System.
- ii All documented information, whether in paper or electronic media, shall be understandable and appropriately identified and described, formatted, reviewed and authorised.
- iii To prevent inadvertent use, responsibilities, document authorisation and methods shall be defined for:
 - a) handling, storing, distributing and retaining current documents;
 - b) disposing of obsolete documents;
 - c) ensuring sufficient protection from loss of integrity or improper use.
- iv Methods for creating and amending documents shall be defined and records of amendments shall be maintained.
- v An authorised person shall approve documents prior to release. The date of approval shall be shown on all documents.
- vi The Environmental Policy and Objectives and Targets shall be approved by a senior member of staff.
- vii Documents shall be reviewed periodically, and revised as necessary, to ensure that they remain relevant and effective.
- viii Where obsolete documents are retained, they should be annotated to prevent inadvertent use and the retention period defined.

D. System and Process Procedures

- i Procedures shall be developed and implemented for each of the following areas¹⁴.

¹³ This builds up on the requirements for keeping Environmental Records under Level 2 F.

¹⁴ At Level 5, procedures shall also be developed for conducting Internal Audits and producing the Environmental Report.

System Procedures shall be documented for the following:

- a) how the organisation identifies applicable compliance obligations relating to its Environmental Aspects, and how these are kept up to date;
- b) how the organisation ensures that it is compliant with compliance obligations relating to its Environmental Aspects;
- c) how the organisation identifies and evaluates its Environmental Aspects and Impacts, and how this information is kept up to date;
- d) how the organisation controls possible emergency situations, and responds to pollution incidents;
- e) how the organisation identifies training needs and trains people on relevant environmental issues;
- f) how the organisation monitors and measures its progress towards Objectives and Targets and overall environmental performance;
- g) how the organisation collects, calculates and reports Greenhouse Gas emissions;
- h) how the organisation controls the documents that form part of the Environmental Management System;
- i) how the organisation maintains its environmental records, including the collection, analysis and reporting of environmental and legal compliance indicators;
- j) how the organisation prepares its Environmental Statement or Environmental Report;
- k) how the organisation monitors the effectiveness of the Environmental Management System, identifies any problems and carries out corrective and preventive action to address these problems;
- l) how the organisation communicates on environmental issues to all relevant persons, and where those communications are recorded;
- m) how the organisation communicates internally and externally on issues relating to the environmental management system and compliance obligations;
- n) how the organisation carries out its Management Reviews.

Process procedures shall be developed to:

- o) control working practices and aspects of the organisations activities that could have a significant environmental impact, to address compliance obligations, risks and opportunities and be consistent with a life cycle perspective.
- p) process control measures shall be documented if their absence could lead to deviation from the Environmental Management System planned outcomes, Environmental Policy commitments and Objectives and Targets.

ii These procedures shall clearly communicate the following information including:

- a) responsibility for activities within the Environmental Management System;
- b) what activities need to be done;
- c) when those activities need to take place;
- d) how the activities are carried out.

iii The organisation shall prepare detailed working instructions to complement the above

procedures, as necessary.

- iv All documented System and Process Procedures will include appropriate document controls.
- v Senior members of staff will ensure that the Environmental Management System, related process procedures and documents are integrated with other business systems and processes.

E. System Monitoring

- i The organisation shall establish methods and indicators to measure, track and determine the effectiveness of its Environmental Management System.
- ii The organisation shall allocate responsibilities, and develop methods, for identifying, correcting and preventing problems relating to the performance and effectiveness of the Environmental Management System.
- iii The organisation shall review all improvement actions taken and their effectiveness to determine whether any changes need to be made in order to prevent the reoccurrence of problems.
- iv The organisation shall document any changes to procedures arising from the implementation of improvements in the effectiveness of the Environmental Management System, corrective or preventive action.

LEVEL 5 - CONTINUAL ENVIRONMENTAL IMPROVEMENT

A. Internal Audit Programme

- i The organisation shall establish a method for periodically auditing the Environmental Management System to ensure that it has been properly implemented and maintained, and is compliant with all relevant requirements of the Green Dragon Environmental Standard®.
- ii Responsibilities shall be allocated, and methods developed for:
 - a) planning and conducting audits;
 - b) reporting the results of audits;
 - c) maintaining audit records.
- iii A documented schedule of audits shall be developed defining the:
 - a) scope and criteria, including purpose, activity and subject areas;
 - b) environmental significance;
 - c) time period and frequency of audits.
- iv Audits shall take place at least annually, but their frequency shall depend on:
 - a) the environmental significance and complexity of the relevant subject;
 - b) risks and opportunities;
 - c) previously identified problems.
- v Auditors shall be suitably trained and sufficiently competent to carry out effective, objective and impartial audits. Their competency shall be defined within the Environmental Management System.
- vi Where issues are identified during the internal audit programme they will be recorded in accordance with Non-Conformance and Corrective Action Level 2 E.
- vii Audit activities shall include:
 - a) interviews with personnel;
 - b) inspections of equipment and site conditions;
 - c) review of documentation, data and records.
- viii The results of audits shall be documented and communicated to senior management.
- ix The audit process shall be developed as a formal procedure and the Environmental Management System shall be amended to take consideration of this.

B. Management Review

- i Senior management and all other relevant personnel shall carry out a full review of the Environmental Management System at least annually.
- ii The Management Review shall act as a forum for Continual Environmental Improvement and

reviewing the effectiveness of the Environmental Management System by assessing:

- a) the organisation's achievements and progress towards its environmental Objectives and Targets;
 - b) the effectiveness of environmental monitoring;
 - c) conformance with compliance obligations;
 - d) changes to the context in which the organisation operates;
 - e) internal and external communications;
 - f) internal audits, the effectiveness of corrective and preventative actions;
 - g) the results of actions from previous management reviews;
 - h) changes in identified risks, opportunities and significant environmental aspects;
 - i) strategic direction of the organisation and other elements of the organisations activities to ensure compliance EMS requirements.
- iii The Management Review shall, if relevant, lead to:
- a) amendment of the Environmental Policy;
 - b) revision of the Objectives and Targets;
 - c) changes to any other elements of the Environmental Management System;
 - d) confirmation of compliance obligations;
 - e) confirmation that Significant Environmental Aspects are controlled to ensure compliance with commitments made in the Environmental Policy.
- iv The results of the Management Review shall be documented, retained and communicated to relevant personnel.
- v The Management Review process shall be described within a formal documented procedure.

C. Supply Chain

- i The organisation shall assess the performance and practices of its contractors, subcontractors and suppliers to identify associated Environmental Aspects and Impacts.
- ii The organisation shall take action to ensure that suppliers, contractors and subcontractors are aware of and comply with its Environmental Policy and relevant procedures when carrying out activities on its behalf.

D. Greenhouse Gas Emissions (Scope 3) and Reducing Emissions¹⁵

- i. The organisation may consider, in addition to the data on Greenhouse Gas emissions collected in Level 3(H), monitor and maintain data on other Greenhouse Gases (GHG)

¹⁵ Greenhouse gas emissions are grouped into three 'scopes' by the widely-used international accounting tool, the Greenhouse Gas (GHG) Protocol.

released as an indirect consequence of their operations, known as Scope 3 emissions¹⁶. Activities monitored may include:

- a) supply chain procurement of purchased materials and fuels and embedded carbon e.g. extraction, processing and production;
- b) activities relating to transport not owned by the organisation e.g. business travel (use of public transport), use of 'grey fleet' (use of employees' own vehicles where fuel costs are claimed back via expenses), distribution and commuting;
- c) disposal of waste e.g. recycling;
- d) sold goods and services;
- e) emissions from contractors, franchising, outsourcing and leased assets;
- f) agriculture e.g. soil management and emissions of nitrous oxides, methane emissions from ruminant animals and manure management;
- g) land use and change, and forestry e.g. removal of carbon emissions from the atmosphere from tree planting.

Scope 3 emissions, where applicable, are encouraged however they are not a compulsory requirement.

- ii. The organisation shall determine the nature and impacts of all Greenhouse Gases monitored and record the procedure for collecting and collating data.
- iii. The organisation shall determine a benchmark, relating to actual or normalised data, to enable year-on-year comparison of its Greenhouse Gas emissions. This benchmark must adequately reflect the organisation's activities and scope of the Environmental Management System.
- iv. The organisation shall set quantified targets for the reduction of Greenhouse Gases emissions. This shall be clearly stated in its Objectives and Targets.
- v. The annually calculated GHG emission figures shall be converted to the Carbon Dioxide equivalent, endorsed by senior management, and published as part of the organisation's Environmental Report.

E. Environmental Report¹⁷

- i The organisation shall report annually and publicly on its environmental performance.
- ii Responsibilities shall be allocated for the production of the Environmental Report.
- iii The Environmental Report shall contain the following information:
 - a) a description of the reporting body along with an explanation of its boundaries and scope, including its relationship to any parent organisation where appropriate;
 - b) a description of how the Environmental Management System meets the requirements of the Green Dragon Environmental Standard®;
 - c) an introduction to the activities, products, services and onsite operations of the

¹⁶ CO2 emissions may be calculated using the tables and conversion factors contained in the Green Dragon Guidance for Implementers and Assessors.

¹⁷ The Environmental Report replaces the Environmental Statement (Level 3 Section I).

- organisation;
 - d) the organisation's Environmental Policy and a brief description of its Environmental Management System;
 - e) a description of the Management Review and outcomes;
 - f) an overview of the organisation's Significant Environmental Aspects and Impacts with an explanation of the relationship between them;
 - g) a description of the criteria used to assess the significance of the organisation's Environmental Aspects and Impacts;
 - h) a description of the current Objectives and Targets and an explanation of their relationship to the Significant Environmental Aspects and Impacts;
 - i) an overview of the organisation's performance against its previous Objectives and Targets, including summaries of data where appropriate;
 - j) a clear and separate section on Greenhouse Gas emissions reflecting actions taken and information gathered per Level 5(D) "Reducing Greenhouse Gas Emissions";
 - k) a summary of Key Environmental Performance Indicator data collected as a result of measuring and monitoring other environmental parameters to that described in Sub-Section (i);
 - l) an overview of the organisation's compliance with relevant compliance obligations;
 - m) a summary of the organisation's management activities in relation to the prevention and mitigation of pollution incidents;
 - n) a summary of current actions and future plans that will demonstrate a commitment to Sustainable Development;
 - o) any other relevant issues relating to the environmental performance of the organisation.
- iv) When stated, figures shall be clear and unambiguous and allow for year on year comparison to assess the environmental performance of the organisation.
- v) The Environmental Report shall be endorsed by senior management and made available to interested parties.
- vi) The production of the Environmental Report shall be described in a documented procedure and the Environmental Manual shall be amended to reflect this.
- vii) The Environmental Report shall be validated as part of the Green Dragon audit by a Registered Assessor during both initial and re-assessments of the Standard. The Environmental Report shall document:
- a) That the Environmental Report has been externally verified as part of the Green Dragon audit;
 - b) The name and contact details of the Registered Assessor and auditing organisation;
 - c) The date of Environmental Report validation and expiry.
- viii) The Environmental Report shall be made available to other interested parties and made publically available, for example where practicable on the organisation's website or provided on request to interested parties.
- ix) The Environmental Report shall be supplied for publication on the Green Dragon Environmental Standard® website: www.greendragonems.com .

APPENDIX 1: LINKS WITH OTHER ENVIRONMENTAL STANDARDS

Table A1 – Correspondence between Green Dragon Environmental Standard®, BS 8555:2016, ISO 14001:2015 and EMAS:2017.

Green Dragon Environmental Standard®		BS 8555:2016	ISO 14001:2015	EMAS:2017
Commitment to Environmental Management		Level 1		
Responsibilities & Resources	A	P1-s1, P3-s1 (P4-s1)	5.1, 5.3, 7.1	A.5.1, A.5.3, A.7.1. B.2, B.6
Environmental Review	B	P1-s2, P1-s7, P1-s3, (P1-s6, P4-s2)	(4.1),(4.2),(4.3),(6,1,1), (6.1.3), (6,1,4), (7.2), (7.3), (7.4), (8), (9)	Annex I. B.3
Environmental Policy	C	P1-s4, P3-s4	5.2	A.5.2. B.1
Environmental Monitoring	D	P1-s6, P2-s2, P3-s7	9.1.1	A.9.1.1
Improvement Plan	E	P3-s5, P3-s6	(5.1), (5.2), (6.1.1), (6,2,1), (6,2,2), 10.3	(A.5.1), (A.5.2), (A.6.1.1), (A.6,2,1), (A.6,2,2), A.10.3. B.5
Understanding Environmental Responsibilities		Level 2		
Register of Compliance Obligations	A	P1-s3, P2-s1	4, 5.2, 6.1.3	A.4, A.5.2, A.6.1.3. B.4
Managing Compliance Obligations	B	P2-s2	6.1.1, 6.1.3, 7.2, 7.3, 8.1, 9.1.2, 9.3, 10.2	A.6.1.1, A.6.1.3, A.7.2, A.7.3, A.8.1, A.9.1.2, A.9.3, A.10.2, Annex III. B.4
Emergency Preparedness	C	P4-s3	8.2	A.8.2
Internal Communication and Competence	D	P4-s6 P1-s5, P2-s3, P4-s4	5.2, 6.1.2, 6.2.1, 7.2, 7.3, 7.4.2	A.5.2, A.6.1.2, A.6.2.1, A.7.2, A.7.3, A.7.4.2. B.7
Non-conformance and corrective action	E	P5-s2	10.2	A.10.2
Environmental Records	F	P4-s7	(7.5.1), (7.5.2), (7.5.3)	(A.7.5.1), (A.7.5.2), (A.7.5.3)
Managing Environmental Impacts		Level 3		
Environmental Aspects Register	A	P1-s3	6.1.2	A.6.1.2
Evaluation of Environmental Aspects	B	P3-s1	6.1.2	A.6.1.2
Control of Environmental Aspects	C	P4-s1, P4-s2	8.1	A.8.1
Pollution Prevention Plan	D	P4-s3	(8.1), (8.2)	(A.8.1), (A.8.2)
Objectives and Targets	E	P3-s5, P3-s6	(5.1), (5.2), 6.2, (7.1), (7.4.2), (8.1), (9.1), 9.3, 10.3	(A.5.1), (A.5.2), A.6.2, (A.7.1), (A.7.4.2), (A.8.1), (A.9.1), A.9.3, A.10.3. B.5

Green Dragon Environmental Standard®		BS 8555:2016	ISO 14001:2015	EMAS:2017
Addressing Sustainability	F	n/a	n/a	n/a
Monitoring Key Environmental Performance Indicators	G	P1-s6, P2-s2, P3-s7	9.1.1.	A.9.1.1.
Greenhouse Gas Emissions Data Collection (Scope 1)	H	(P1-s6, P2-s2, P3-s7)	n/a	n/a
Environmental Statement	I	A.5	n/a	Annex IV Environmental Reporting
External Communications	J	P4-s6	7.4.3	A.7.4.3, B.7
Environmental Management Programme	Level 4			
Training	A	P1-s5, P2-s3, P4-s4	7.2, 7.3, (8.2)	A.7.2, A.7.3, (A.8.2). B.6
Environmental Manual	B	P4-s7	(4.1), (4.2), (4.3), (4,4), (7.5).	(A.4.1), (A.4.2), (A.4.3), (A.4,4), (A.7.5).
Document Control	C	P4-s7	(7.5.1), (7.5.2), 7.5.3	(A.7.5.1), (A.7.5.2), A.7.5.3
System and Process Procedures	D	various	various	various
System and Process Monitoring	E	P5-s2	9.2, 9.3, 10.2	A.9.2, A.9.3, A.10.2
Continual Environmental Improvement	Level 5			
Internal Audit Programme	A	P5-s1,	9.2.1, 9.2.2	A.9.2.1, A.9.2.2
Management Review	B	P5-s3	9.3	A.9.3
Supply Chain	C	P4-s2	8.1	n/a
Greenhouse Gas Emissions (Scope 3) and Reducing Emissions	D	(P1-s6, P2-s2, P3-s7)	n/a	n/a
Environmental Report	E	A.5	n/a	Annex IV Environmental Reporting

Table A2 – Correspondence between BS 8555:2016 , Green Dragon Environmental Standard®, ISO 14001:2015 and EMAS:2017.

BS 8555:2016		Green Dragon Environmental Standard®	ISO 14001:2015	EMAS:2017
Leadership, context and commitment	Phase 1			
Top management commitment and leadership	Stage 1	1-A	5.1	A.5.1
Establish the organisation's context	Stage 2	1-B	4.1	A.4.1, B.3. Annex I.
Undertake a baseline assessment	Stage 3	1-B	(4.1),(4.2),(4.3),(6,1,1),(6.1.3),(6,1,4), (7.2), (7.3), (7.4), (8), (9).	Annex I. B.3
Process for developing an environmental policy	Stage 4	1-C	(5.2)	(A.5.2)
Develop awareness and competence	Stage 5	1-B, 2-D, 4-A	(A.7.2, A.7.3)	(7.2, 7.3), B.7
Determine data requirements	Stage 6	1-D, 3-G (L3-H, L5-D)	9.1.1	A.9.1.1
Plan for the establishment and improvement of the EMS	Stage 7	1-B, 1-E	4.4 (6.2.1, 10.3)	Annex I. B.3
Ensure compliance	Phase 2			
Identify relevant compliance obligations	Stage 1	2-A	6.1.3	(A6.1.3)
Evaluate compliance	Stage 2	2-B	6.1.3, 9.1.2	(A.6.1.3, A.9.1.2)
Manage compliance	Stage 3	2-B, 2-C	8.1, 9.1.2	A.8.1, A.9.1.2
Plan and develop the environmental management system	Phase 3			
Finalize roles and responsibilities	Stage 1	1-A	5.3	A.5.3
Determine significant environmental aspects	Stage 2	3-A, 3-B	6.1.2	A.6.1.2
Identify risks and opportunities	Stage 3	1-B, 3-A, 3-B	6.1.1	A.6.1.1. Annex I. B.3
Finalise the environmental policy	Stage 4	1-C	5.2	A.5.2
Develop environmental objectives	Stage 5	1-E, 3-E, 5-B, C, D	6.2.1	A.6.2.1
Plan for achievement of environmental objectives	Stage 6	1-E, 3-E	6.2.2	A.6.2.2
Monitor, measure, analyse and evaluate environmental performance	Stage 7	1-D, 3-F	9.1.1	A.9.1.1
Implement the environmental management system	Phase 4			
Operational Control	Stage 1	3-C	8.1	A.8.1
Value chain controls	Stage 2	3-C, 5-C	8.1	A.8.1
Emergency preparedness and response	Stage 3	2-C, 3-C, 3-D	8.2	A.8.2

BS 8555:2016		Green Dragon Environmental Standard®	ISO 14001:2015	EMAS:2017
Competence management	Stage 4	2-D, 4-A	7.2	A.7.2, B.6
Awareness Raising	Stage 5	1-B, 2-D, 4-A	7.3	A.7.3, B.6
Establishing communication programme	Stage 6	2-D, 3-I	7.4	A.7.4, B.7
Manage documented information	Stage 7	2-F, 4-B, 4-C, (4-D)	7.5	A.7.5
<i>Check and update the environmental management system</i>	<i>Phase 5</i>			
Establishing internal audit programme	Stage 1	5-A	9.2.1, 9.2.2	9.2.1, 9.2.2. Annex III.
Correct nonconformities	Stage 2	2-E	10.1, 10.2	A.10.1, A.10.2
Management review	Stage 3	5-B	9.3	A.9.3
Improve the EMS and environmental performance	Stage 4	1-E, 3-E, (3-G), (5-B), (5-D)	4.4, 6.1.4, 6.2, 9.3, 10.1, 10.2, 10.3	4.4, 6.1.4, 6.2, 9.3, 10.1, 10.2, 10.3. B.1, B.5.

Table A3 – Correspondence between ISO 14001:2015, Green Dragon Environmental Standard®, BS 8555:2016 and EMAS:2017.

ISO 14001:2015		Green Dragon Environmental Standard® 2016	BS 8555:2016	EMAS:2017
Context of the organisation	4			
Understanding the organisation and its context	4.1	1-B	P1-s2	A.4.1
Understanding the needs and expectations of interested parties	4.2	1-B, 2-A	P1-s2	A.4.2
Determining the scope of the environmental management system	4.3	1-B	P1-s7	A.4.3
Environmental management system	4.4	1-B, (4-B), 4-D	P1-s7	A.4.4
Leadership	5			
Leadership and commitment	5.1	1-A	P1-s1	A.5.1
Environmental policy	5.2	1-C	P1-s4	A.5.2, B.1.
Organisational roles, responsibilities and authorities	5.3	1-A	P1-1, P3-s1	A.5.3, B.2.
Planning	6			
Actions to address risks and opportunities	6.1			A6.1, B.3.
General	6.1.1	1-B, 2-A,C, 3-A, 4-D	P1-s3, P2-s3, P3-s3	A.6.1.1, B.3. Annex I.
Environmental aspects	6.1.2	3-A, 3-B, 3-C, (3-D)	P3-s1	A.6.1.2
Compliance obligations	6.1.3	2-A,	P1-s3, P2-s1	A.6.1.3, B.4.
Planning action	6.1.4	1-B, 1-E, 3-C,E, 4-D	P2-s3, P3-s2, P3-s3	A.6.1.4
Environmental objectives and planning to achieve them	6.2			A.6.2
Environmental objectives	6.2.1	1-E, 3-E, (5-D)	P3-s5	A.6.2.1, B.5.
Planning actions to achieve environmental objectives	6.2.2	1-E, 3-E, (5-D)	P3-s6	A.6.2.2
Support	7			
Resources	7.1	1-A, (3-E)	P1-s1	A.7.1
Competence	7.2	2-D, 4-A	P1-s5, P4-s5	A.7.2, B.6.
Awareness	7.3	2-D, 4-A	P1-s5, P4-s5	A.7.3
Communication	7.4			A.7.4, B.7.
General	7.4.1	1-C, 2-D, 3-I	P4-s6	A.7.4.1
Internal communication	7.4.2	2-D, 3-I	P4-s6	A.7.4.2

ISO 14001:2015		Green Dragon Environmental Standard® 2016	BS 8555:2016	EMAS:2017
External communication	7.4.3	1-C, 3-I	P4-s6	A.7.4.3. Annex IV.
Documented information	7.5			
General	7.5.1	4-B	P4-s7	A.7.5.1
Creating and updating	7.5.2	4-C	P4-s7	A.7.5.2
Control of documented information	7.5.3	4-C	P4-s7	A.7.5.3
Operation	8			
Operational control	8.1	3-C, 4-D	P4-s1, P4-s2	A.8.1
Emergency preparedness and response	8.2	2-C, 3-C, 3-D, 4-D	P4-s3	A.8.2
Performance evaluation	9			
Monitoring, measurement, analysis and evaluation	9.1			A.9.1
General	9.1.1	1-B,1-D, 3-G,H, 4-G, 5-D	P1-s6, P3-s7	A.9.1.1
Evaluation of compliance	9.1.2	2-B, 4-D	P2-s2	A.9.1.2
Internal Audit	9.2			A.9.2. Annex I.
General	9.2.1	5-D	P5-s1	A.9.2.1
Internal audit	9.2.2	5-D	P5-s1	A.9.2.2
Management review	9.2.3	5-B	P5-s3	A.9.2.3
Improvement	10			
General	10.1	1-B, 1-C, 1-E, 2-E, 3-E, 4-F, 5-B	P5-s4	A.10.1
Non-conformity and corrective action	10.2	2-E	P5-s2	A.10.2
Continual improvement	10.3	1-B, 1-C, 1-E, 2-E, 3-E, 4-F, 5-B	P1-s7, P5-s4, P5-s4	A.10.3, B.1.

Table A4 – Correspondence between EMAS:2017, ISO 14001:2015, BS 8555:2016, Green Dragon Environmental Standard®.

EMAS:2017		Green Dragon Environmental Standard® 2016	ISO 14001 :2015	BS 8555:2016
Environmental Management System Requirements	Annex II – Part A, Part B.			
Context of the organisation	A.4			
Understanding the organisation and its context	A.4.1	1-B	4.1	P1-s2
Understanding the needs and expectations of interested parties	A.4.2	1-B, 2-A	4.2	P1-s2
Determining the scope of the environmental management system	A.4.3	1-B	4.3	P1-s7
Environmental management system	A.4.4	1-B, (4-B), 4-D	4.4	P1-s7
Leadership	A.5			
Leadership and commitment	A.5.1	1-A	5.1	P1-s1
Environmental policy	A.5.2	1-C	5.2	P1-s4
Continual improvement of environmental performance	B.1	1-B, 1-C, 1-E, 2-E, 3-E, 4-F, 5-B.	5.2, 10.3	P5-s4
Organisational roles, responsibilities and authorities	A.5.3	1-A	5.3	P1-1, P3-s1
Management representative(s)	B.2	1-A	(5.1) 5.3	P1-1, P3-s1
Planning	A.6			
Environmental Review	B.3 Annex 1	1-B	(4.1),(4.2),(4.3),(6,1,1), (6.1.3), (6,1,4), (7.2), (7.3), (7.4), (8), (9)	P1-s3
Actions to address risks and opportunities	A6.1			
General	A.6.1.1,	1-B, 2-A,C, 3-A, 4-D	6.1.1	P1-s3, P2-s3, P3-s3
Environmental aspects	A.6.1.2	3-A, 3-B, 3-C, (3-D)	6.1.2	P3-s1
Compliance obligations	A.6.1.3	2-A,	6.1.3	P2-s1
Legal Compliance	B.4	2-A, 2-B	6.1.3, 8.1	Phase 2 – s1, s2, s3.
Planning action	A.6.1.4	1-B, 1-E, 3-C,E, 4-D	6.1.4	P2-s3, P3-s2, P3-s3
Environmental objectives and planning to achieve them	A.6.2			
Environmental objectives	A.6.2.1, B.5.	1-E, 3-E, (5-D)	6.2.1	P3-s5
Planning actions to achieve environmental objectives	A.6.2.2	1-E, 3-E, (5-D)	6.2.2	P3-s6

Support	A.7			
Resources	A.7.1	1-A, (3-E)	7.1	P1-s1
Competence	A.7.2	2-D, 4-A	7.2	P1-s5, P4-s5
Employee Involvement	B.6.	1-A, 2-D, 4-A	7.2	P1-s5, P4-s5
Awareness	A.7.3	2-D, 4-A	7.3	P1-s5, P4-s5
General	A.7.4.1	1-C, 2-D, 3-I	7.4.1	P4-s6
Internal communication	A.7.4.2	2-D, 3-I	7.4.2	P4-s6
External communication	A.7.4.3	1-C, 3-I	7.4.3	P4-s6
Communication	B.7 Annex IV.	1-C, 3-I, 5-E	7.4.3	P4-s6
Documented information	A.7.5			
General	A.7.5.1	4-B	7.5.1	P4-s7
Creating and updating	A.7.5.2	4-C	7.5.2	P4-s7
Control of documented information	A.7.5.3	4-C	7.5.3	P4-s7
Operation	A.8			
Operational control	A.8.1	3-C, 4-D	8.1	P4-s1, P4-s2
Emergency preparedness and response	A.8.2	2-C, 3-C, 3-D, 4-D	8.2	P4-s3
Performance evaluation	A.9			
Monitoring, measurement, analysis and evaluation	A.9.1		9.1	
General	A.9.1.1	1-B,1-D, 3-G,H, 4-G, 5-D	9.1.1	P1-s6, P3-s7
Evaluation of compliance	A.9.1.2	2-B, 4-D	9.1.2	P2-s2
Internal Audit	A.9.2. Annex III.		9.2	
General	A.9.2.1	5-D	9.2.1	P5-s1
Internal audit	A.9.2.2	5-D	9.2.2	P5-s1
Management review	A.9.2.3	5-B	9.2.3	P5-s3
Improvement			10	
General	A.10.1	1-B, 1-C, 1-E, 2-E, 3-E, 4-F, 5-B	10.1	P5-s4
Non-conformity and corrective action	A.10.2	2-E	10.2	P5-s2
Continual improvement	A.10.3, B.1.	1-B, 1-C, 1-E, 2-E, 3-E, 4-F, 5-B	10.3	P1-s7, P5-s4, P5-s4

Table A5 – From ISO 14001:2015, EMAS:2017 or BS8555:2016 to Green Dragon Environmental Standard® 2016.

For organisations operating environmental management systems fully compliant with either BS 8555:2016 , ISO 14001:2015 or EMAS, who wish to become inspected to the Green Dragon Environmental Standard®, the table below details where changes may need to be made in order to achieve the various levels of the Green Dragon Environmental Standard®.

Green Dragon Environmental Standard® 2016	ISO 14001:2015	BS 8555:2016	EMAS:2017
LEVEL 1	<p>Carry out an initial Environmental Review which meets the Green Dragon Environmental Standard requirements.</p> <p>Make the Environmental Policy available for publication on the Green Dragon Environmental Standard® website.</p> <p>Ensure that environmental performance monitoring includes energy, water and wastes.</p>	<p>Ensure that environmental indicators include energy, water and wastes.</p> <p>Make the Environmental Policy also available for publication on the Green Dragon Environmental Standard® website.</p>	<p>Ensure the initial environmental review meets the requirements set out in the Green Dragon Environmental Standard.</p> <p>Make the Environmental Policy available for publication on the Green Dragon Environmental Standard® website.</p> <p>Ensure that environmental performance tracking includes energy, water and wastes.</p>
LEVEL 2	<p>To include at least one auditable Objective and Target pursuing economic and /or social improvements within the framework of Sustainable Development. To be incorporated within the overall Objectives and Targets as required within Level 3(E) and managed accordingly.</p>	<p>To include at least one auditable Objective and Target pursuing economic and /or social improvements within the framework of Sustainable Development. To be incorporated within the overall Objectives and Targets as required within Level 3(E) and managed accordingly.</p>	<p>To include at least one auditable Objective and Target pursuing economic and /or social improvements within the framework of Sustainable Development. To be incorporated within the overall Objectives and Targets as required within Level 3(E) and managed accordingly.</p>
LEVEL 3	<p>Calculate Scope 1 & 2 Greenhouse Gas emissions and add to the Environmental Statement.</p> <p>Prepare an Environmental Statement according to the requirements of the Green Dragon Environmental Standard® and make it available for publication on its website.</p> <p>Prepare an external</p>	<p>Calculate Scope 1 & 2 Greenhouse Gas emissions and add to the Environmental Statement.</p> <p>Prepare an Environmental Statement according to the requirements of the Green Dragon Environmental Standard® and make it available for publication on its website.</p> <p>Prepare an external</p>	<p>Calculate Scope 1 & 2 Greenhouse Gas emissions and add to the Environmental Statement.</p> <p>Prepare an Environmental Statement according to the requirements of the Green Dragon Environmental Standard® and make it available for publication on its website.</p> <p>Prepare an external</p>

Green Dragon Environmental Standard® 2016	ISO 14001:2015	BS 8555:2016	EMAS:2017
	communications procedure if none in place.	communications procedure if none in place.	communications procedure if none in place.
LEVEL 4	Document all System Procedures and compile an Environmental Manual.	Document all System Procedures and compile an Environmental Manual.	Document all System Procedures and compile an Environmental Manual.
LEVEL 5	<p>Assess your supply-chain's environmental Performance.</p> <p>Consider calculating Scope 3 Greenhouse Gas emissions and calculate (and set reduction targets for) all Greenhouse Gases emissions.</p> <p>Prepare an Environmental Report according to all the requirements of the Green Dragon Environmental Standard® (including GHG records and endorsement by Senior Management) and make it available for publication on the Green Dragon Environmental Standard® website.</p>	<p>Assess your supply-chain's environmental Performance.</p> <p>Consider calculating Scope 3 Greenhouse Gas emissions and calculate (and set reduction targets for) all Greenhouse Gases emissions.</p> <p>Ensure the Environmental Report includes all the reporting requirements of the Green Dragon Environmental Standard® (including GHG records and endorsement by Senior Management) and make it available for publication on the Green Dragon Environmental Standard® website.</p>	<p>Assess your supply-chain's environmental Performance.</p> <p>Consider calculating Scope 3 Greenhouse Gas emissions and calculate (and set reduction targets for) all Greenhouse Gases emissions.</p> <p>Ensure the Environmental Report includes all the reporting requirements of the Green Dragon Environmental Standard® (including GHG records and endorsement by Senior Management) and make it available for publication on the Green Dragon Environmental Standard® website.</p>