



ENVIRONMENTAL STATEMENT 2018

Reporting period 1 January 2017 to 31 December 2017





EMAS - the Eco-Management and Audit Scheme, is a voluntary initiative designed to improve companies' environmental performance. It was initially established by European Regulation 1836/93, although this has been replaced by Council Regulation 1221/2009.

Its aim is to recognise and reward those organisations that go beyond minimum legal compliance and continuously improve their environmental performance. In addition, it is a requirement of the scheme that participating organisations regularly produce a public environmental statement that reports on their environmental performance. It is this voluntary publication of environmental information, whose accuracy and reliability has been independently checked by an environmental verifier, that gives EMAS and those organisations that participate enhanced credibility and recognition.

EMAS is strongly backed by Government and the environmental regulators - organisations who participate are recognised as making strong commitments to the environment and to improving their economic competitiveness.

Optichrome Group

Optichrome Ltd is part of the Optichrome Group. Throughout this statement, unless stated otherwise, references to Optichrome are Optichrome Limited.

Our purpose-built building is owned by Optichrome Group and office space is rented to five small office-based companies. These companies share our waste and recycling facilities and their heating, electricity and water is included in their rental and not itemised.

Managing Director's Statement

Welcome to the sixth EMAS Environmental Statement produced by Optichrome.

Since 1963, Optichrome has been blending traditional and trusted family values with innovation and business excellence, constantly demonstrating an ethical, responsible and caring philosophy.

2017 was another highly successful year as we reaped the benefits of our performance related investments. Our programme of investment is ongoing and keeps us abreast of industry developments, offering our clients and potential clients cutting edge communication techniques.

Our success, of course, is not simply down to investment in equipment. Our staff are a prized asset and our relationships with clients our strength. For three generations Optichrome has offered apprenticeships and we recently reached the milestone of fifty trained apprentices.

Strengthened in 2017, Optichrome now has in place an impressive range of external verification of our efforts and procedures covering quality, security and, of course, an environmental profile matched by very few companies in the United Kingdom.

John Heywood



Managing Director

John Early
For and on behalf of NQA
Verifier ref: (UK-V-0012)
18 May 2018





Company History and Profile

Optichrome was founded by Ken Stephens, in 1963, as a small printing company using only lithographic processes. Prior to 1968 and the move to the current purpose-built premises, Optichrome was based at two other sites in Woking. Optichrome has grown, evolved and diversified and offers a range of print services that includes digital presses.

Optichrome's customers are businesses and organisations located mainly in the south east of England, with the majority in the London area. Our client range is diverse and consists of charities, NGOs, financial and retail sectors.

Activities and Services

All print operations are housed within one building, owned by Optichrome.

Our product range is broad and Optichrome offers a 'one-stop' print service. From design and file processing, to a diverse range of finishing processes, we are able to perform all stages of the print process for a vast majority of projects in-house.

We have litho and digital printing capabilities, allowing us to produce a diverse range of products:

- Fast cost-effective turnaround, short runs of full colour items, using small format digital processes
- Longer runs and larger formats of digital print using reel-fed processes
- A diverse range of products using litho processes

Heidelberg XL75 B2 press

Installed in the summer of 2015, this investment realised immediate performance benefits. From reduced set-up times, to a reduced amount of press consumables, to improved quality and colour control and increased running speeds – this press places Optichrome at the forefront of lithographic capabilities.

Benefits have also been realised in environmental terms; most notably reduced use of IPA and energy savings...that also serve to reduce the emissions associated with our operations.

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Our digital set up

For smaller volumes, or where extra-fast turnaround or personalisation is required – or a combination of these – digital printing is the answer. We have the digital print capability to suit your application ... near-litho quality full colour presses for your short run, high quality communications, to high speed duplex mono machines with full collation, all capable of producing complex personalised mailers, statements and sales and marketing materials.

Environmental Profile and Certification

Optichrome is at the forefront of digital and litho techniques and a shining example of environmental improvements through technological advancement.

Optichrome became ISO 14001 certified in 2012, FSC (Forest Stewardship Council) in 2009 and EMAS registered in 2013.

Climate Change

Climate change is higher on the world's agenda than ever before and *all* businesses (not just print) need to play a part in reducing emissions to help the UK meet its commitments established in Paris in December 2015.

Optichrome has since 2011 established and publicly reported its annual emissions, after external verification of the data. We have in place a robust framework to measure, monitor and reduce our emissions: from common sense actions to reduce our energy use to the benefits gained by investing in latest print technologies.





Quality and data security

In 2017 Optichrome became certified for both ISO 9001 and ISO 27001

ISO 9001 is an international standard that specifies requirements for a quality management system and we use this scheme to demonstrate our ability to consistently provide products and services that meet customer and regulatory requirements.

ISO 27001 is an international specification for an information security management system. It is our mechanism for evaluating and controlling the information risk management processes.

Staff Involvement, Internal and External Communication

We are fully aware that staff education, communication and involvement is crucial to the effectiveness of all operations from our Environmental Management System, to general health and safety and internal initiatives to improve efficiency.

All new staff receive an induction and a copy of our 'Staff Handbook'. As well as covering legal and employment matters the handbook covers health and safety and environmental issues.

Environmental matters are discussed at monthly managers' meetings and communicated staff via a variety of mechanisms.

We recognise the potential for external communication via our website and we externally communicate our environmental commitment via the Environmental Policy and our performance via the current EMAS Environmental Statement.

We believe the proactive use of our website to communicate environmental matters will play a role in raising awareness levels and ultimately, standards within UK print.

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Environmental Policy

This Environmental Policy is established, implemented and maintained by the directors.

It is our framework for setting environmental objectives to improve our environmental performance.

It is our public commitment to:

- Protection of the environment, including preventing pollution
- Meeting our compliance obligations, including legal requirements
- Continual improvement of our Environmental Management System to enhance environmental performance.

Policy Communication

This Environmental Policy is displayed internally and communicated to all staff. It is publicly available via our website and our annual Eco Management & Audit Scheme (EMAS) statements.

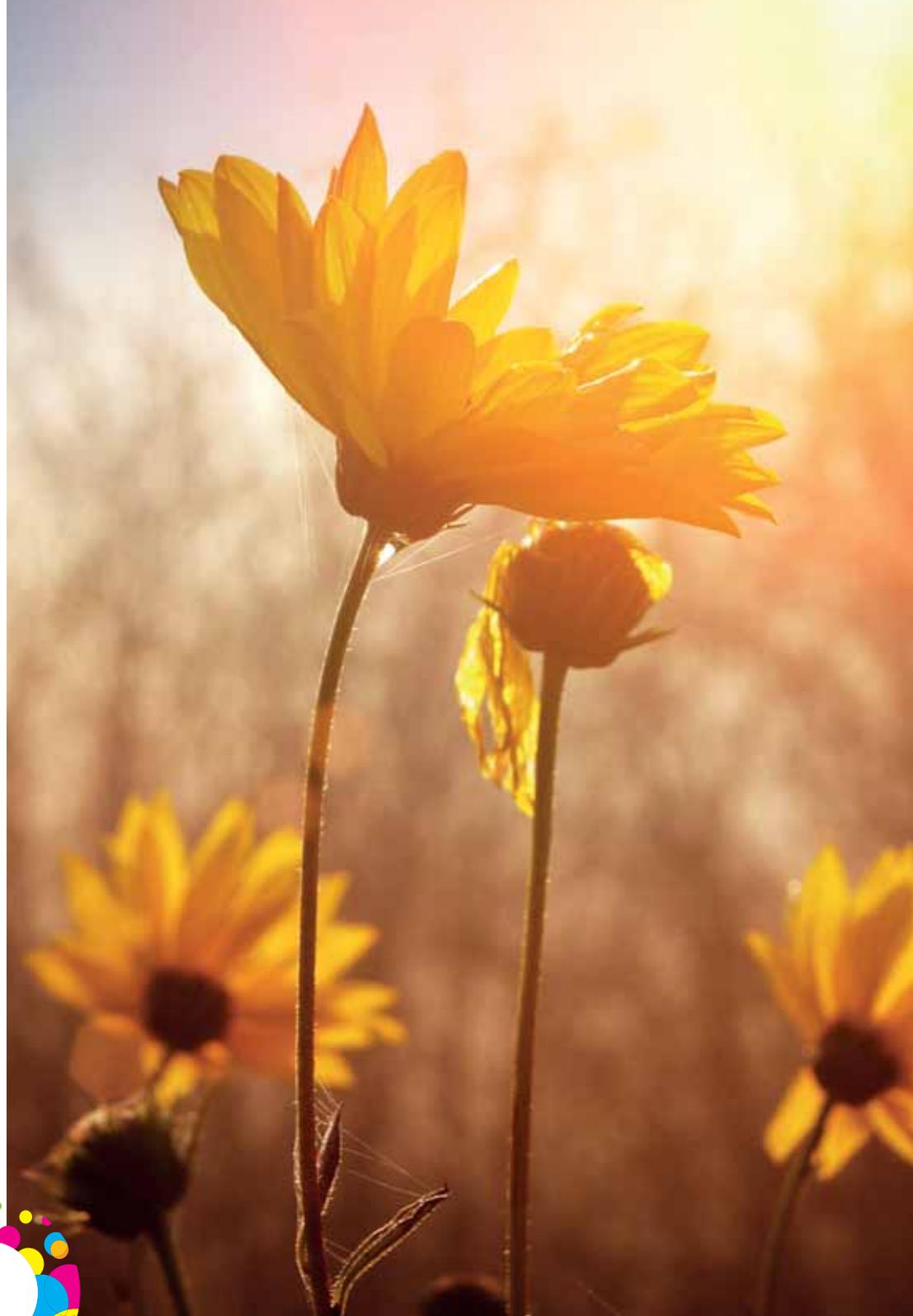
This Environmental Policy conforms to the requirements of ISO 14001: 2015
It will be reviewed on an annual basis.

Signed



Richard Bond
Operations Director
April 2017

John Early
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Environmental Management System (EMS)

Our EMS conforms with international standards set by ISO 14001: 2015 and acts as a framework for environmental awareness, compliance with legislation and continual improvement. In conjunction with EMAS we have a robust system for environmental management in place.



Through ISO 14001, we:

- Maintain an externally audited register of our direct environmental impacts that forms the foundation of our EMS
- Identify our potential significant environmental impacts
- Monitor and manage our environmental impacts
- Maintain a database of legal and other requirements
- Set specific targets and objectives for environmental improvement
- Employ the services of a specialist environmental consultant to undertake regular internal audits for legal compliance and to check that our EMS is working effectively and meeting the requirements of ISO 14001



Through EMAS, we:

- Gather performance data
- Monitor and analyse our performance in detail
- Publicly report, after external verification, our environmental performance
- Publicly commit to annual environmental targets and report on our success in meeting these targets



Additionally through FSC® certification, we

- offer our clients a mechanism for showing their environmental awareness on their printed materials
- promote the FSC® message.

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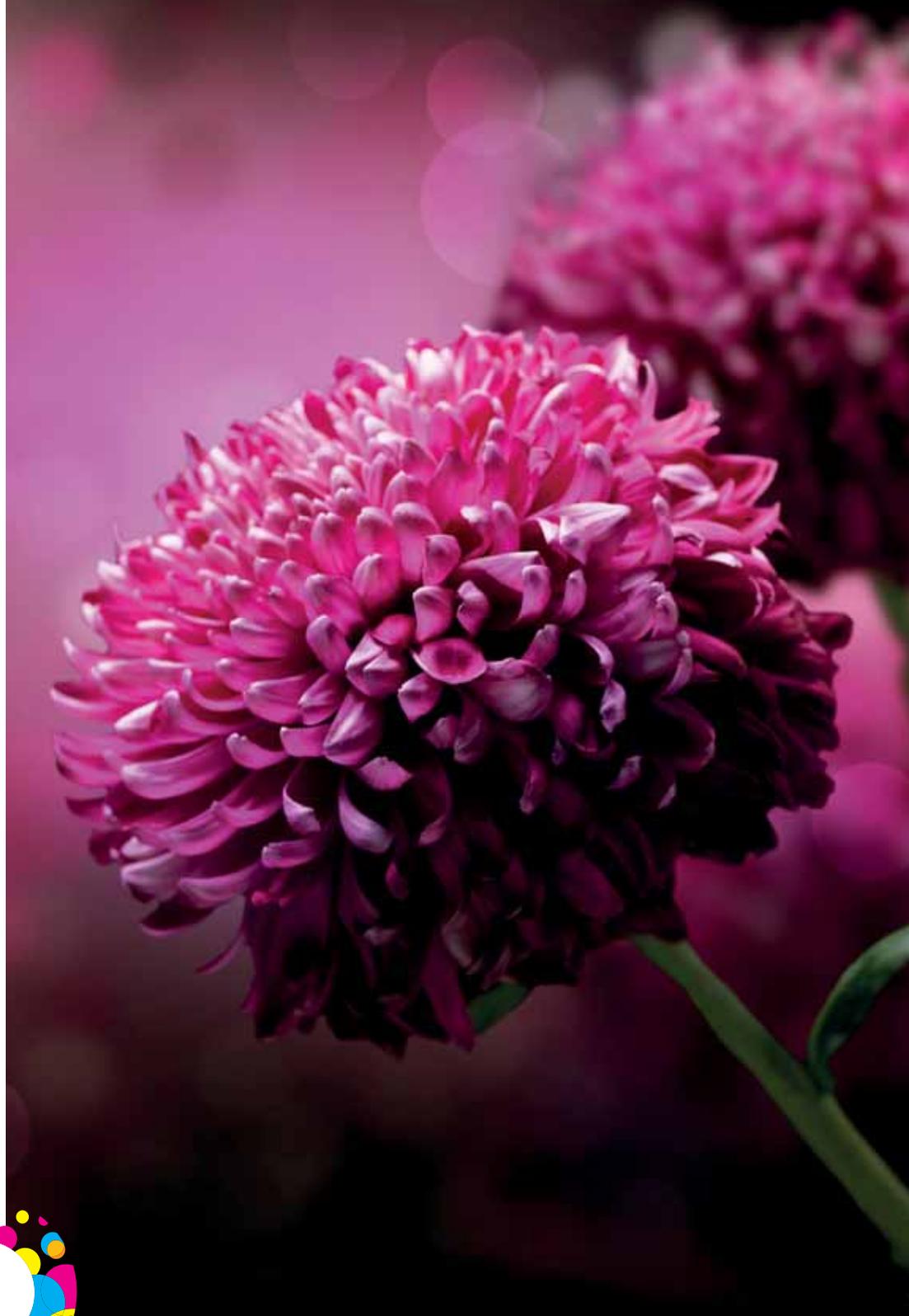
Significant Environmental Aspects

Optichrome has carried out an exhaustive evaluation of its operations in order to establish environmental impacts. Our register of significant environmental impacts includes:

1. **Emergencies (fire, explosion, leaks, spills)** - potential harm to human health and buildings
2. **Energy use – gas/electricity** - generation from non-renewable, fossil fuels
3. **Hazardous waste** - safe storage (potential spills)
4. **General waste** - safe storage and volumes sent to landfill
5. **Discharge to/contamination of surface drains** - potential pollution
6. **Solvents in print room** - safe handling and storage, air quality, VOC action on atmospheric gases

Positive Environmental Aspects

Relative to printing industry norms, Optichrome can boast a diverse range of positive environmental aspects: our main lithographic press is at the forefront of technology and thus uses significantly less energy and requires lower levels of IPA.





Legal Compliance

We maintain a manual for our Environmental Management System, including relevant legislation and codes of practice. Through ISO 14001 this is both internally and externally audited every six months for accuracy and compliance. The following are our key appropriate legislation requirements:

Duty of Care

All waste generated by Optichrome is collected for recovery or safe disposal by licensed companies. Our EMS demands that we check and hold copies of each company's license.

Water Industry Act: Trade Effluent Discharge Consent

Our water is supplied by Affinity Water. Our waste water is disposed of by Thames Water. Our current water use and disposal is classed as domestic and discharge consent is not required.

Water Resources Act: Releases to water

Under the Water Resources Act it is an offence to cause pollution of any watercourse. This is specifically relevant to our storage of hazardous waste and we ensure compliance through safety precautions to prevent leaks and spillages and have resources and procedures in place for use in the event of a spill.

Environmental Permitting Regulations: Emissions to air

Our low solvent use and associated emissions to air, mean we do not need a Local Authority Permit.

Producer Responsibility Obligations – Packaging Waste

Optichrome does not handle more than 50 tonnes of packaging each year and is therefore not obligated under the Packaging Waste Regulations.

Fluorinated Greenhouse Gas Regulations

Applicable to our air conditioning equipment, fluorinated greenhouse gases (F-gases) are powerful greenhouse gases that contribute to global warming should they enter the atmosphere. We undertake six-monthly servicing that includes leak testing, hold service records and ensure that service engineers are appropriately qualified.

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Objectives and Targets for 2017: How did we do?

Optichrome's annual targets for improvement are directly linked our identified significant environmental aspects.

Aspect: 1. Emergencies (fire, explosion, leaks, spills)

Objective: Onsite incident prevention

Stringent safety mechanisms and emergency procedures are in place and communicated to staff.

Specific target: Zero onsite incidents.

Achieved?

Yes. There were no incidents in 2017.

Aspect: 2. Energy use

Objective: Reduced energy use

In 2017 we will undertake an energy assessment by the Carbon Trust.

Specific target: To introduce one energy-saving recommendation from the Carbon Trust assessment.

Achieved?

Carbon Trust audit was completed and recommendations received.

This target has been carried forward to 2018.

Aspects: 3. Hazardous waste, 5. Discharge to/contamination of surface drains and 6. Solvents in print room

Objective: prevention of onsite incidents

Stringent procedures and safety mechanisms are in place for handling and storing hazardous waste, spill prevention and action in the event of a spill.

Specific Target: Zero onsite incidents.

Achieved?

Yes, there were no incidents in 2017.

Aspect: 4. General waste

Objective: To reduce general waste volumes

General waste volumes were reduced significantly in 2016 - our container size reduced by 50 percent - but we recognise there is potential for further improvement.

Specific target: We will undertake a detailed survey of our general waste and by the end of 2017, further reduce our container size or collection frequency.

Achieved?

Yes, our general waste was surveyed. Due to increasing company size, turnover and waste, it is not possible at the present time to reduce our container size or collection frequency.

Additional objective

In 2017 Optichrome will introduce a new EMS that meets the requirements of the new ISO 14001: 2015 regulations

Achieved?

Yes. In May 2017 Optichrome's EMS was successfully audited against the new ISO 14001 regulations.



Objectives for 2018

In 2018 our main performance-improvement objectives will be driven by our ongoing programme of investment. We expect to realise performance, financial and environmental benefits.

Aspect: 1. Emergencies (fire, explosion, leaks, spills)

Objective: Onsite incident prevention

Stringent safety mechanisms and emergency procedures are in place and communicated to staff.

Specific target: Zero onsite incidents.

Aspect: 2. Energy use

Objective: Reduced energy use

Facilitated by our ongoing investment and resultant performance improvements, and increased LED lighting, we expect to see energy use in 2018 reduce.

Specific target: To reduce electricity use by 1 percent relevant to annual turnover.

Aspects: 3. Hazardous waste, 5. Discharge to/contamination of surface drains and 6. Solvents in print room

Objective: Onsite incident prevention

Stringent safety mechanisms and emergency procedures are in place and communicated to staff.

Specific target: Zero onsite incidents.

Aspect: 4. Hazardous waste

Hazardous waste- safe storage and volumes sent to landfill.

Objective: To reduce volumes

Introducing LED lighting (see Energy use above) will also reduce in the long term, our hazardous waste in the form of fluorescent light tubes.

Specific target: To reduce hazardous waste and to establish the reduction in 2018 via monitoring.



Measuring Our Performance

Context to reporting our performance data

Optichrome's financial year runs from 1 May to 30 April. For the purpose of environmental reporting, an average monthly turnover figure has been established for January to April 2017 and for May to December 2017.

A note on work trends in 2017

Efficiency increased in 2017 due to increased print run lengths, requiring (relatively) reduced associated resources (other than substrates) and shifts. Additionally, we reaped benefits from earlier performance investments.

Energy Efficiency	Units	2017 total	Gross annual turnover (£millions)	2017 Ratio	2016 Ratio
Electricity (standard tariff)	MWh	772.31	6.55	117.91	132.01
Gas	MWh	44.26	6.55	6.76	9.67
Total direct energy use	MWh	816.57	6.55	124.67	141.68

Water Consumption	Units	2017 total	Staff numbers	2017 Ratio	2016 Ratio
Water Consumption	m3	1362	50	27.24	30.32
Normalised against staff numbers					

Material Efficiency	Units	2017 total	Gross annual turnover (£millions)	2017 Ratio	2016 Ratio
Printing substrates	tonnes	795.23	6.55	121.41	115.63
Inks	tonnes	3.09	6.55	0.47	0.57
Sealer / coater / specialist varnishes	tonnes	6.43	6.55	0.98	1.18
IPA	tonnes	1.40	6.55	0.21	0.25
Density of 0.786 used to convert to tonnes					
Total materials purchased	tonnes	806.14	6.55	123.07	117.63

Waste	Units	2017 total	Gross annual turnover (£millions)	2017 Ratio	2016 Ratio
Non hazardous waste total	tonnes	211.78	6.55	32.33	38.57
Hazardous waste total	tonnes	4.24	6.55	0.65	0.67
Core Indicator: biodiversity					
One unit and associated grounds	M ²	5250	6.55	801.53	965.25

Data for the above is collected through supplier invoices, statements and delivery notes.

Emissions

Methodology for emissions calculations

Defra/DECC's GHG Conversion Factors for Company Reporting 2017.

Emissions of CH₄ and N₂O associated with our use of energy for production, heating and transport purposes have been taken into account in the calculation of our greenhouse gas emissions which are expressed as tonnes of Carbon Dioxide Equivalent CO₂e.

Our processes do not produce significant emissions of other air pollutants (such as Hydrofluorocarbons, Perfluorocarbons, Sulphur hexafluoride).

No electricity is generated on site.

Delivery transport figures are calculated on our own vans only and not courier deliveries. We estimate that 10-15% of deliveries (mainly local) are made by our vans.

Carbon Dioxide Equivalent (CO ₂ e)	Tonnes	Turnover £m	Ratio 2017	Ratio 2016
Direct energy: electricity	271.51	6.55	41.45	61.02
Direct energy: gas	8.15	6.55	1.24	1.78
Delivery transport fuel	29.50	6.55	4.50	3.8
Total	309.16	6.55	47.20	66.60

Total annual air emission	Tonnes	Turnover £m	Ratio 2017	Ratio 2016
SO ₂ - Sulphur dioxide	0.06	6.55	0.0092	0.0092
NO _x - Oxides of nitrogen	0.16	6.55	0.0244	0.0279
Total	0.22	6.55	0.03	0.04



Environmental Incidents

Environmental incidents are recorded and discussed at Monthly Managers' Meetings. No incidents were reported during 2017.

Memberships and Support Activities

Optichrome is a member of the British Printing Industries Federation.

Optichrome supports a number of local charities and organisations by supplying printed items, free of charge.



Verification

Further to consideration of the documentation, data, and information resulting from the organisation's internal procedures examined on a sampling basis during the verification process, it is evident that the environmental policy, program, management system, review (or audit procedure) and environmental statement meet the requirements of Regulation 1221/2009 (The EMAS Regulation).

Optichrome will produce an annual update to this environmental statement in April 2019.









optichrome
PRINT AND DIGITAL

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