



Marshalls
Creating Better Spaces

Environmental KPI 2016

www.marshalls.co.uk/sustainability





CONTENTS


Marshall's


STONEMARKET

Marshall's plc group


Marshall's
Tile and Stone Interiors


Marshall's
Premier Mortars and Screeds


Marshall's


Stancliffe Stones
BRITISH & INTERNATIONAL STONES
FOR THE BUILT ENVIRONMENT

Introduction 3

Board Responsibility 4

Environmental Policy - Key Features 4

Environmental Management..... 5

Environmental Impact..... 5

Carbon..... 6

Water..... 9

Transport 10

Waste Reduction..... 11

Packaging..... 12

Suppliers and Contractors 13

Environmental Impact of Products 13

Sustainability 14

Land Management 14

Environmental Awareness and Training 14

Biodiversity 15

Legal Compliance 16

Verification 16

Environmental Report

Marshalls is the UK's leading hard landscaping manufacturer supplying superior natural stone and innovative concrete products to the construction, home improvement and landscape markets since the 1890s. As a market leader in its sector, the Group operates manufacturing sites and quarries throughout the UK.

Corporate responsibility, an awareness and mitigation of adverse impacts on the environment and positive engagement with our community and employees have long been core values of Marshalls. We aim to align our business values, purpose and strategy with the social, economic and environmental needs of our stakeholders, embedding responsible and ethical business policies and practices in everything we do.

Our commitment to these values is led by the Board and Jack Clarke is the Director with primary responsibility for reporting to the Board on environmental, social and sustainability matters. We aim to achieve the highest standards of environmental performance. Whether it is reducing our carbon footprint or promoting biodiversity we strive for real environmental results in everything we do.

Marshalls has a mandatory duty to report its greenhouse gas emissions under the Companies Act 2006 (Strategic and Director's Reports) Regulations 2013 and the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulation 2008 and this disclosure can be found in its Annual Report and Account 2015 on page 26.

This Environmental Report is for the financial period January to December 2015 and covers our energy performance in more detail together with reporting of our environmental governance, policies, management and key environmental impact area such as waste, water and packaging. The contents of the report have been audited by a qualified verifier on behalf of BSI and are considered to be a fair reflection of the environmental performance of the organisation during 2015.



Jack Clarke
Group Finance Director with board
responsibility for Environmental Management



Stoneface Veneer Walling, Drystack, Copper Slate

Board Responsibility

The Group's Finance Director, Jack Clarke, is the Director responsible for the Environmental Performance of the Group. The Group's Environmental Policies are approved by the Board and reviewed at least annually. The full text of the Policies can be found on the Group's website www.marshalls.co.uk/our-policies.

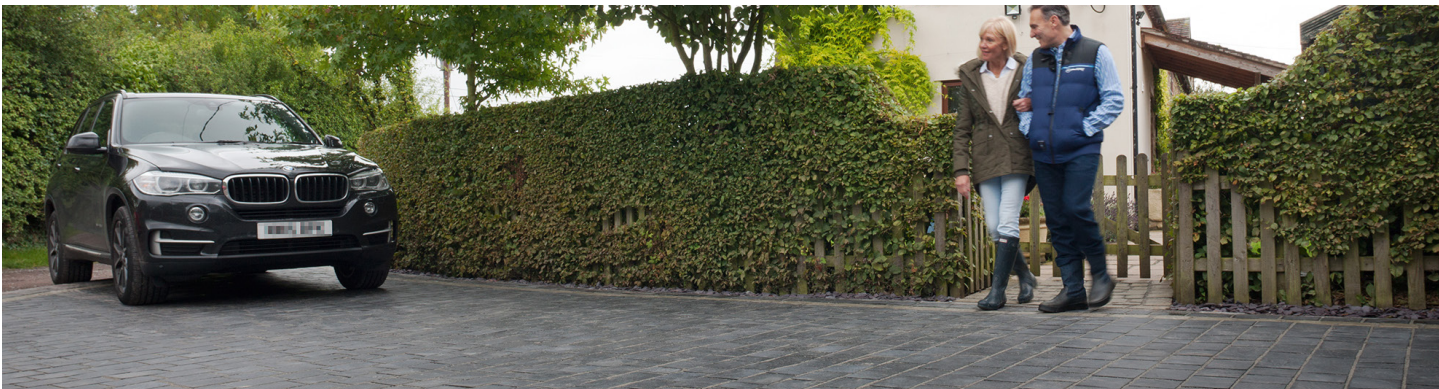
Phase one of the board strategy was completed in 2015 and the next phase will take the business to 2020. This strategic vision will have an impact on the objectives and targets defined in the Policies and this requires additional work to be undertaken. The aim is to issue the Policies to the business during April 2016.

Until that time the current Policies and targets, date January 2015 are considered appropriate for our activity.

Environmental Policy – Key Features

Target – To operate within the relevant legal frameworks and comply with appropriate legislation.

- The Group has a commitment to achieving the highest standards of environmental performance, preventing pollution and minimising the impact of its operations.
- All operations should meet or exceed the requirements of legislation and applicable best practice. Where no legislation exists, best practice will remain an integral part of Marshalls' business strategy.
- The Group is committed to considering the environmental impacts associated with its products throughout their life cycle.
- Policy is supported by monitoring and measuring environmental performance using appropriate external guidelines wherever practicable. Operating sites have assessed the environmental aspects of their activities, and objectives and targets aimed at improving the overall environmental impact of those activities have been set. These are reviewed on at least an annual basis.
- Marshalls will continue to raise environmental awareness within the Group through the development and training of its employees and will communicate openly and consult with customers, suppliers and other stakeholders on relevant environmental matters.
- Marshalls strives to protect and enhance biodiversity and natural habitats within its landholdings where possible. The Group also recognises the need for sympathetic restoration and after-use of quarry and other operational sites.
- Marshalls considers the character of the local environment and the concerns of the local community and other stakeholders in relation to its activities.



Drivesys Riven Stone, Basalt

Environmental Management

Target – 95 per cent of Group production to be manufactured at sites operating an integrated management system in accordance with Publicly Available Specification 99:2006 (“PAS 99”) to be maintained to 2020.

Marshalls reviewed its Group target in 2013 and revised this to 95 per cent. During the year 42 (2014: 43) sites. The target was achieved in the year and the Group aims to maintain compliance to this target to 2020, however it recognises that any business churn may in the short term adversely affect its ability to do so.

During 2015 the Group had 47 operational* sites (2014: 49). Of these sites:

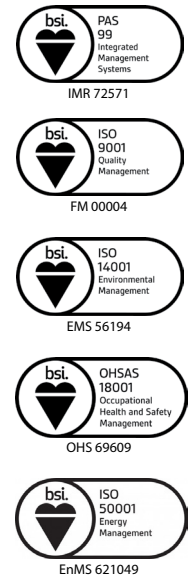
- 46 (2014: 47) had BS EN ISO 9001:2008 Quality Management Systems in place representing 99 per cent of the Group’s manufacturing output.
- 44 (2014: 45) had BS EN ISO 14001:2004 for Environmental Management Systems in place representing 99 per cent of the Group’s manufacturing output.
- 44 (2014: 46) had BS OHSAS 18001:2007 for Health and Safety Management Systems in place representing 99 per cent of the Group’s manufacturing output.

In addition to these, the Group also had PAS 99-compliant management systems in place at its Group Laboratory, Marketing Support Department, Landscape House and a distribution site in the Midlands.

“In 2015 Marshalls engaged Cedrec Information Systems to provide specialist legal services to support their assessment of legal requirements. Cedrec undertook compliance assessments at a selection of Marshalls’ sites on an annual basis, reviewing legal compliance, scale of environmental aspects and measures taken by Marshalls to minimise and reduce their impacts. Marshalls’ sites are well controlled, comply with necessary permit requirements and have a well-established programme of risk management including energy management (to ISO 50001), carbon footprinting, water and waste to landfill reduction. For the range of activities undertaken at their sites, Marshalls’ robust environmental management and engagement with legal compliance is delivering a low risk outcome in terms of environmental and pollution impacts.”

Richard Clarke, Senior Environment Health and Safety Consultant, Cedrec Information Systems

* Operational is defined as a site in the UK with production output during the reporting year.



Environmental Impact

The business is currently redefining its Sustainability Policies and Key Performance Indicators (“KPI”) to align to its 2020 business strategy and to ensure they are relevant and appropriate to its stakeholders.

Marshalls is a signatory to the Sustainable Concrete Forum, a collaborative industry initiative, which published a new road map, with time-bound targets to 2020 aimed at reducing the environmental impacts of the industry. The latest performance report is the 8th Report on Progress which will be published in March 2016 and which can be found on the Marshalls website.

As a member of the Mineral Products Association British Precast Marshalls voluntarily participated in a Resource Efficiency Action Plan with other industries to identify and create an actionable strategy for

improving resource efficiency within the supply chain. The plan identifies the key challenges and actions that the sector and its associated supply chain need to address in order to make improvements in waste, water, carbon (energy usage and emissions), materials (primary raw materials and secondary/recycled materials) and biodiversity.

Marshalls does not operate processes that require the legislative monitoring of emissions to air of NOx and SOx and only one site that is permitted for VOCs in relation to the spray painting of street furniture items.

Carbon

Target – to reduce our absolute CO₂e consumption in line with UK Government targets (34 per cent by 2020 and 80 per cent by 2050 from a 1990 baseline).

Marshalls' Energy and Climate Change Policy approved by the Board during the year confirms the Group's commitment to reducing the Energy and Carbon impact of its business activities. The current reduction is in line with the 2020 and 2050 targets.

The Group complied with its legal obligation in the Government's Carbon Reduction Commitment Energy Efficiency Scheme ("CRC") by submitting its Annual Report and surrender of Carbon allowances for the period April 2014 to March 2015 within the time limit imposed by the legislation. The Group is certified to the Carbon Trust Standard and is re-certified up to December 2016 demonstrating ongoing commitment to carbon reductions.



Marshalls has a mandatory duty to report its annual Greenhouse Gas Emissions ("GHG") under the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013 and the Large

and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008. Marshalls uses the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) and the latest Defra published CO₂e conversion factors to measure its GHG emissions.

The Group reports its scope 1 and 2 GHG emissions for its UK operation and only CO₂ emissions for Marshalls NV, its Belgium business. In previous years, the Group has conducted audits of its UK fugitive emissions and found these to be less than half of one per cent of the

Group total emissions. It considered that there has been no material change to this situation and thus continues to exclude these from this report.

Marshalls does not report its scope 3 emissions separately however these are included in the 'cradle to grave' product carbon footprints certified to PAS2050 by the Carbon Trust and available on the Marshalls website.

The business energy and carbon KPIs are aligned to Mandatory Carbon Reporting and CRC through the measurement of energy at both absolute and relative intensity levels and the business remains committed to reducing energy use on both these measures.

The Group's approach to the Energy Savings Opportunity Scheme ("ESOS") legislation was to define its energy management in compliance with the international standard for energy management ISO50001, gaining certification in November 2015.

The Group continues to report voluntarily to the Carbon Disclosure Project ("CDP"). It received a 98B rating for its 2015 report which includes a wider carbon management performance over time and also provides an insight for shareholders regarding the Group's energy, carbon and climate change impact management programme. The Group reported 53,846 tonnes of CO₂e for the year 2014 (2013: 55,996 tonnes). This data includes scope 1 and 2 emissions as defined in the Greenhouse Gas Protocol ("GHG Protocol") however the emission factors for CDP differ from those of Mandatory Carbon Reporting.



Energy Audits



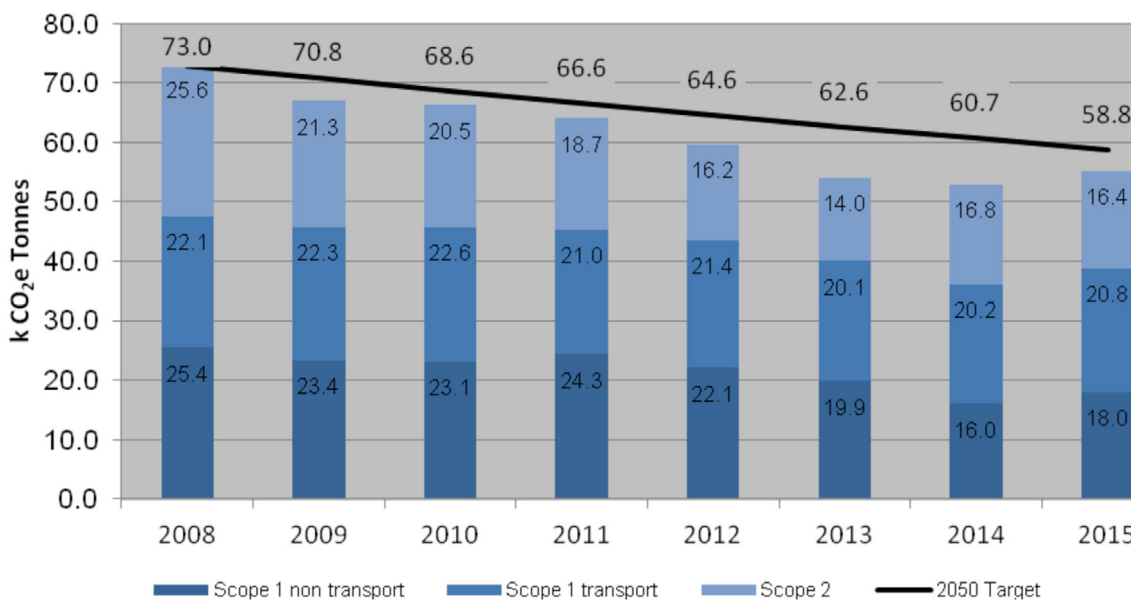
Carbon continued...

The Group continues to acknowledge that renewable energy purchased either directly or indirectly will be required in order to achieve its absolute reduction target. In 2015 Marshalls installed a 250 kilo Watt solar array at its operating site at Sandy, Bedfordshire. This became operational in May and has provided the site with just over 4 per cent of its electricity. The forecast is that it will generate 7 per cent of the site's current

electricity requirement for the next 20 years and provide a substantial reduction in energy costs for the site. Developing large scale on site renewable energy is proving extremely challenging.

The chart below illustrates the Group's absolute CO₂e emissions in tonnes, including transport activities, between 2008 and 2015.

Absolute CO₂e emission from UK operation



The Group's UK GHG emissions for 2015 of 55,182 tonnes CO₂e is an increase of 2247 tonnes CO₂e compared to its 2014 emissions of 52,935 tonnes CO₂e, representing an increase of four per cent. The net increase in absolute emissions is a result of increases in production and as a result of energy efficiency savings which are within the control of the business. Other factors such as business churn, product mix and climate also impact on emissions but out not within Marshalls control.

The Group reports that it is responsible for the GHG emissions of Marshalls NV. The absolute CO₂ emission from this operation in 2015 was 640 tonnes, this is a reduction of 321 tonnes of CO₂ compared to its 2014 emissions of 961 tonnes and related to a strategic business decision to downsize the production output.

The business is continually improving the reliability of its energy data to enable better forecasting and management of its energy and carbon footprint. In 2015, the Group integrated its energy management data with its finance system to improve energy efficiency decision making. The business has a forecast

of its GHG emissions until 2025 and an estimate of the required investment to achieve its targets.

The mix of products manufactured will impact on the Group's absolute and intensity carbon footprint. The Group recognises that if production of low carbon products increases its footprint will reduce accordingly.

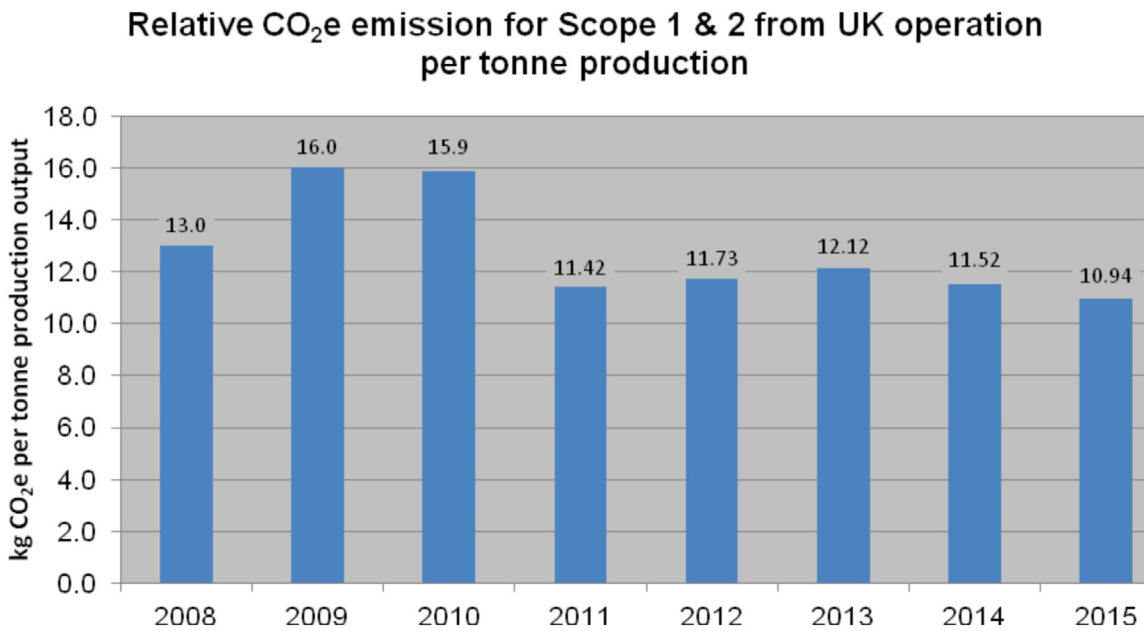
The Group has identified that warm winters have a positive impact on its reported energy use as it requires less fuel to provide comfort and process heating. The business consumed slightly more natural gas in 2015, compared to 2014, against a slight decrease in mean average temperature. In 2015 the group continued to verify its new heating management system and this is replacing old systems as they fail or as part of site energy plans.

Each of the Group's operational sites and main buildings has an energy plan with monitoring and monthly reporting. These reports highlight the site's progress towards its GHG emission reduction with a total reported measureable reduction of 282 tonnes of GHG emissions during the year. During the year a new

Carbon continued...

system of recording, reporting and managing energy efficiency tasks has been introduced to the Group and through use of this system a further 919 tonnes of emissions reduction projects has been identified.

The chart below illustrates the Group's CO₂e intensity emissions as a proportion of production output, including transport activities, between 2008 and 2015



The Group reports that it is responsible for the GHG emissions of Marshalls NV. The intensity CO₂ emission ratio from this operation in 2015 was 8.49 kg CO₂ per

tonne production. The increase in intensity, from the 5.73 kg CO₂ per tonne production reported for 2014 is mainly due to reduced production levels.



Low energy lighting at Marshalls

Water

Target – reduce use of water from mains and licensed boreholes to 0.05m³ per tonne of production by 2015.

Marshalls understands the future value of water and is a signatory to the United Nations Global Compact [CEO Water Mandate](#). The business has demonstrated a commitment to water harvesting and recycling on numerous sites and utilises quarry water where appropriate in its operations.

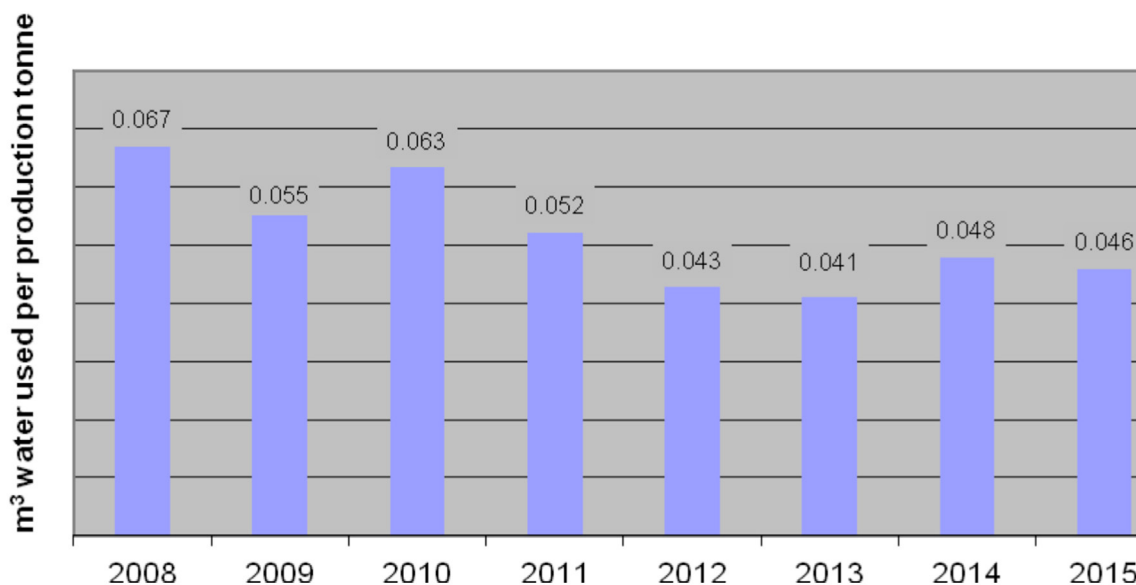
The Group particularly recognises the impacts and risk to the business in areas of “water stress”. Working to the Government’s 2013 classification, developed by the Environment Agency and Natural Resource Wales, two sites within the Group (Sandy ~ Anglian Water and Sittingbourne ~ Southern water) are located in areas of “serious stress”. As is practiced across the Group, recycling of water is employed on both of these sites

and harvesting is undertaken at Sittingbourne further reducing the burden on licensed water extraction in these areas. The Group does not abstract water in “serious stress” areas.

Marshalls has consents in place, issued by the relevant regulatory bodies, to discharge trade effluent. Previous investment in water harvesting and recycling of its process water helps to reduce the overall discharge volumes of trade effluent by enabling re-use in its products.

The chart below illustrates the Group’s water performance between 2008 and 2015

Main & licensed water used per tonne of production output



The above chart shows a decrease in water use, 0.046 m³ per tonne of production in 2015 (0.48 m³ in 2014). The target of 0.05 m³ of licensed water per tonne of production has been met.

Marshalls continues to reduce water intensity and is helped by Marshalls’ previous and continued investment in water management projects, particularly the recycling of water and water harvesting. The UK rainfall, taken from Met Office data, in 2015 was 1289.0 mm (Y2014: 1297.0 mm) being 12.0 per cent above the ten year average. Increased volumes of rainfall have a positive impact on the Group’s reported water figures as the business prioritises the use of harvested rainwater or quarry water before mains or borehole water.

Marshalls is continuing to roll out the installation of automatic water meter reading (“AMR”) across the Group. This allows Marshalls to improve the data accuracy and frequency of monitoring of its mains water use by site leading to identification of potential savings.

Transport

Target – to meet the challenge of reducing emissions whilst striving to maintain and improve upon customer service.

Marshall's operates its own fleet of Large Goods Vehicles ("LGV") to service the majority of its deliveries to customers. As a consequence diesel fuel usage has a significant business impact on the Group's GHG emissions reporting.

The Group is a voluntary member of the Freight Transport Association led Logistic Carbon Reduction Scheme ("LCRS") which has a collective commitment to reduce the carbon dioxide emissions by eight per cent by 2015 (compared to 2010 levels). This initiative also demonstrates our commitment to recording, reporting and reducing carbon emissions while sharing best practice with like minded companies.

During the last three years the Group has invested in a new and increased fleet of 173 mechanical offload LGVs. This investment was partially justified by the fuel efficiency that might be achieved with the latest fuel efficient vehicles, these being a mix of Euro V and Euro VI compliant engines; initial results indicate an improvement in fuel usage of nearly 13 per cent on like for like vehicles.

Marshall's undertakes one-on-one driver training for its LGV fleet drivers, which has the added advantage of gaining a broader understanding of the problems being faced by the drivers, allowing management to address the issues. It is planned to double the resource on this agenda in 2016.



Electrical car charging points at Head Office

The Group uses rail for stock movement to reduce carbon emissions and will continue to look at different modes of transport whenever practicable.

The Group includes energy efficient cars on its car choice including hybrid and electric which together with personal taxation impacts has resulted in an average emission of 116 carbon dioxide grams per kilometre from its car fleet, a reduction from 120 in the last 12 months. An in-house automated report is available to all company car drivers to review their achieved efficiency (miles per gallon).



New fleet of LGVs

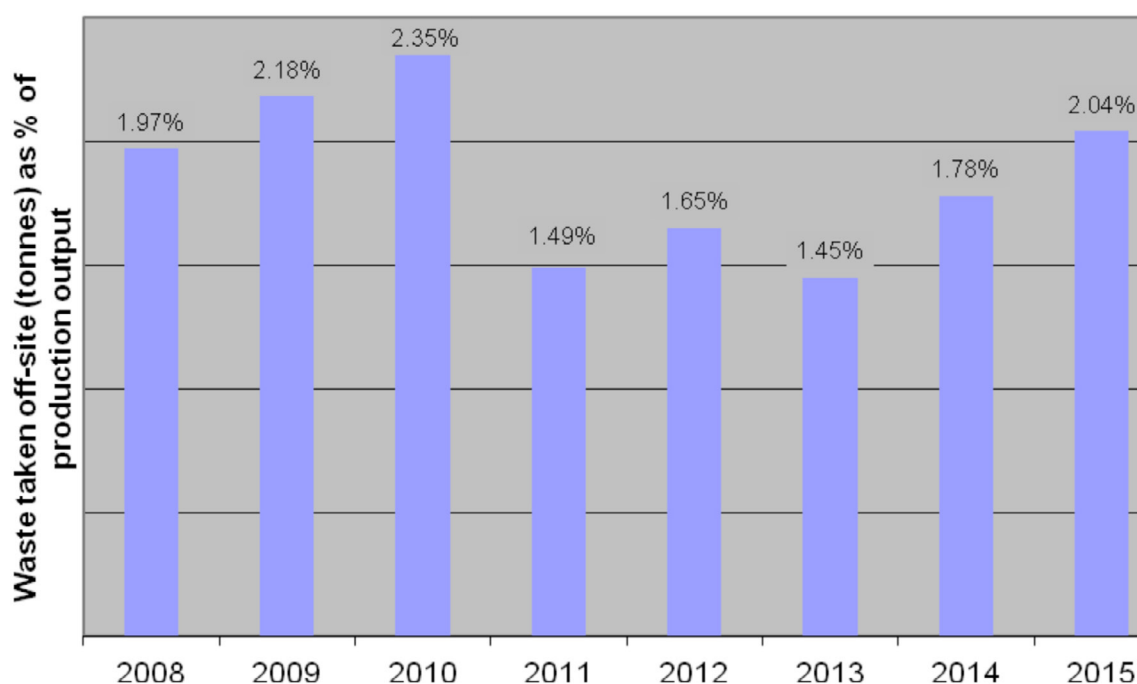
Waste Reduction

Target – to reduce by 3 per cent the total waste to landfill per tonne of production output per annum over a three year rolling average.

The Group has continued to measure the amount of waste, including material for recycling, leaving sites as a percentage of total production output. The business aims to eliminate waste and where it is generated it investigates the opportunity for reuse or recycling within the business.

The chart below illustrates the Group's off-site waste performance between 2008 and 2015

Waste taken off-site as a percentage of total production output



This chart does not differentiate between waste leaving site for reuse / recycling and waste leaving site for landfill. The absolute waste total for the year has increased by nearly six per cent to 142,742 tonnes (2014:134,517 tonnes).

The increase in absolute waste reflects the increase in the Group's production of eight per cent during 2015 and approximately a two percentage point move in product mix to secondary processed products which by their nature increases the amount of waste. The Group continues to improve the accuracy of its data.

Due to improved engagement with our waste service providers, internal communication and focus, the Group has increased its recycling/recovery rate to 98.8 per cent (2014: 95.6 per cent) and reduced its waste sent to landfill to 1.2 per cent (2014: 4.4 per cent) of total waste generated. This demonstrates a

clear commitment to preventing waste generated being sent to landfill and a significant step forward in achieving zero waste to landfill status.

In 2015 the Group used 142,542 tonnes of recycled materials within its products and process. The Group uses almost as much waste as it generate so it may be considered a waste neutral business.

The generation of hazardous waste across the Group is generally limited to plant maintenance items such as used oils, filters and other components. The hazardous waste generated across the Group in 2015 was 184 tonnes which equated to 0.13 per cent of total waste generated.

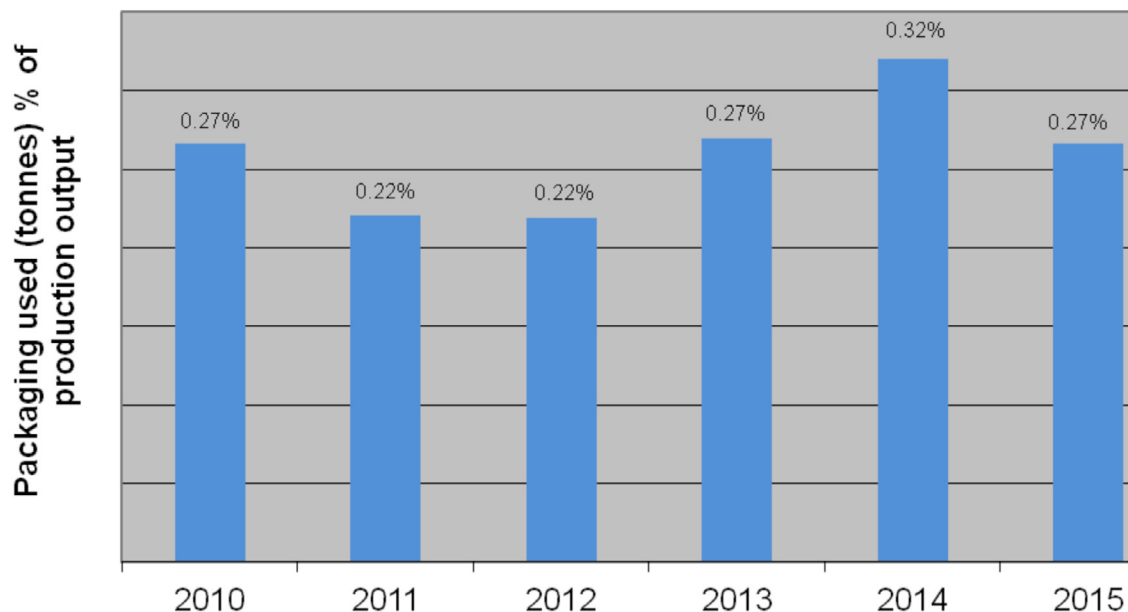
Packaging

Target - reduce by 2 per cent per annum, over a 3 year rolling cycle, while ensuring that the pack and product safety is not compromised

The Group reports packaging used which aligns with the duty to report under the Producer Responsibility Obligations (Packaging Waste) Regulations.

The chart below illustrates the Group's packaging performance between 2010 and 2015

Packaging used as a percentage of production output



The Group used 11,739 tonnes of packaging in the reporting year which was a decrease on the previous years of nearly nine per cent. The intensity ratio of packaging used to production output is 0.27 per cent; this being 8.3 per cent behind the Group's target.

The Group uses packaging only to the extent appropriate, for example, to ensure safe handling, storage and transport of its products and to minimise damage to the product and hence waste. In addition, packaging may be used to provide health and safety information to prospective users of the products and instructions on installation and to comply with the Construction Product Regulations mandatory requirement for CE marking products covered by harmonised European standards. Packaging principally comprises timber pallets and polythene.

The Group continues to concentrate on the reduction of timber and plastic which represent 84 per cent and 15 per cent respectively of the reported packaging tonnage.

This KPI is affected by product mix, as the Group offers a wide range of landscaping products each of which have their own unique packaging requirements. A

significant decrease in the timber packaging usage was associated to the importation of natural stone products which benefitted from a design change to the crate reducing the timber by approximately eight per cent.

Work continues on a number of initiatives to reduce packaging these include the roll out reduced film thickness of polythene shrink-wrap which reduces material usage and energy due to the need to apply at lower temperatures, reduced gauge strapping in both width and thickness and a trial to use sash wrapping.

The Group's Timber and Paper policy continues to support its commitment to obtain pallets from FSC accredited suppliers where available. The Group continues to accept repatriation of pallets which reduces our timber impact. The number of pallets being repatriated in 2015 represents a saving of one per cent of the Group's UK timber packaging a decrease on the previous year due to one customer deciding not to continue with the trial.

Suppliers and Contractors

The Group has an effective Procurement Policy in place. The policy provides a framework which all employees engaged in procurement activities are expected to operate. It contains a clear statement with regard to Marshalls' commitment to responsible sourcing. The Group will continue to work with our key suppliers to ensure they have appropriate management systems to minimise risk and environmental impacts in place.

Where significant risk is identified with a supplier, a rigorous audit will be carried out.

Marshalls' Anti-Bribery Code reinforces policies and procedures already in place and communicated to external suppliers and contractors as well as within the organisation.

Environmental Impact of Products

The Group maintains its policy of producing products intended for a long life with low maintenance. Marshalls became a world leader in terms of the number of its products (over 2,000) having a calculated carbon footprint (using the Publicly Available Specification 2050:2008, 'Specification for the assessment of the life cycle greenhouse gas emissions of goods and services'), all of which have been verified by the Carbon Trust. It is expected that the data obtained through this process will enable the business to focus on energy savings throughout its supply chain.

The results are available online for our customers to use in their selection of most suitable product for their project. A project to recalculate the carbon footprints using the updated methodology PAS2050:2011 has been delayed with the results being available from Spring 2016.

During 2015 the Group completed the annual audit to the Building Research Establishment Responsible Sourcing Standard BES6001 for its concrete paving and walling products and United Kingdom quarried natural stone paving and masonry. The products have all been rated as 'Very Good'.

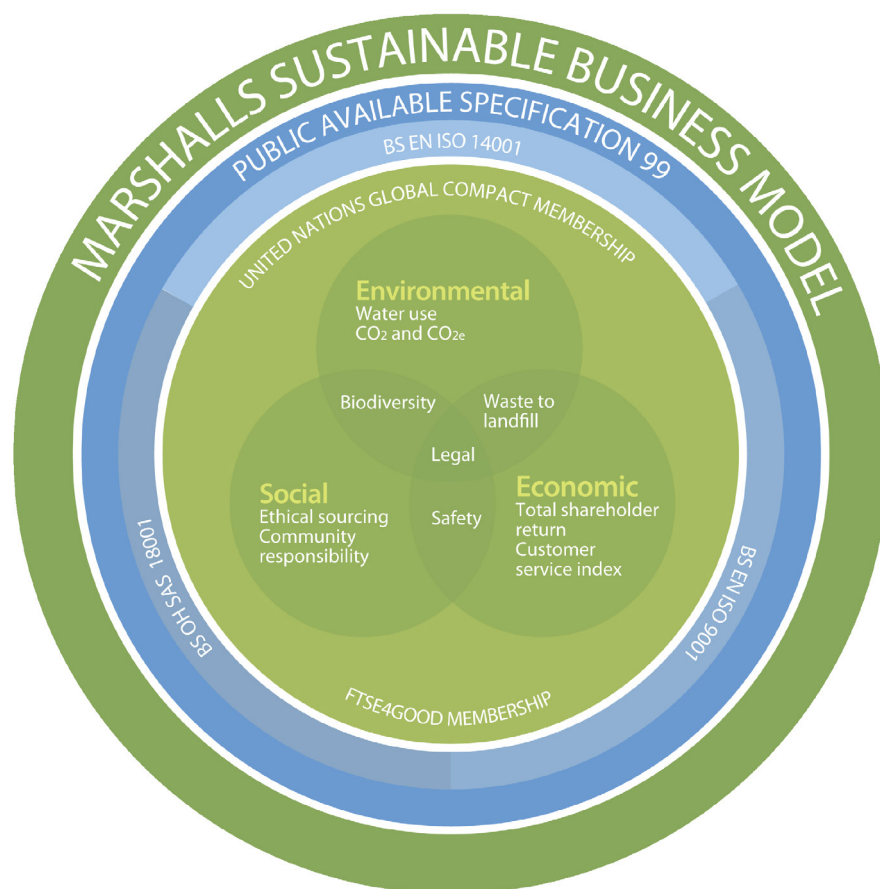
The Group's products are considered to have low environmental risk and in the majority of cases are readily re-usable and recyclable at the end of their life.

The Group is working on initiatives, within its industry, whose aim is to reduce the environmental impact of its products. Through its membership of the Mineral Products Association British Precast it is funding work on Environmental Product Declaration to BS EN 15804 and a Resource Efficiency Action Plan in association with WRAP.



Tegula Priora

Sustainability



Sustainability

The Group publishes targets, progress and data on its website at www.marshalls.co.uk/sustainability to communicate its agenda on the triple bottom line of environmental, social and economic issues. The aim is to have a platform which allows interested stakeholders access to the latest information on our activities.

Marshalls is an active member of the Mineral Products Association British Precast ("MPA British Precast") Sustainability Committee and a signatory of the Precast Sector [Sustainability Charter](#). The business is also a signatory to, and an active member of, the [Sustainable Concrete](#) Forum collaborating to reduce the environmental impact of concrete products.

Land Management

During 2015 all development projects were either located on brownfield land, within Marshalls' sites, or acquired on-going operations.

Environmental Awareness and Training

The Group recognises the need to raise the environmental awareness and competencies of its employees and has continued with an energy management poster campaign aimed at improving the energy culture across the Group together with Toolbox Talk presentation.

Regular shared practice meetings, representing Safety, Health and Environmental administrators from sites are undertaken. This promotes and communicates best practice in relation to environmental management from both Group and site level.

Biodiversity

Target – to maintain legal compliance

The Groups' biodiversity approach is to focus on maintaining legal compliance and be receptive to opportunities that arise to work collaboratively on projects within our ownership.

Marshalls is a corporate member of The Royal Society for the Protection of Birds ("RSPB") and has been working with them to improve the habitat for the Twite (a small brown finch closely related to the Linnet) as part of its planning conditions at two quarry site in the Pennines. Close liaison with the RSPB has resulted in improved and appropriate actions.

Work has been undertaken on two sites as part of planning conditions to plant, protect and maintain trees. As part of the Group's responsibility to control



invasive non-native species a contractor was also appointed to treat an area of Japanese Knotweed

at our Cromwell site to avoid this spreading to any adjacent sites and protect nearby structures.

The Group continued to partner voluntarily with the Yorkshire Wildlife Trust's 'Loving Your Local Limestone Project', to improve an area of magnesium limestone grassland in South Yorkshire. During 2013 the land was fenced, water drinking points provided and species rich green hay spread to improve a more diverse sward and flowers.



Feeding ground for the Twite

Legal compliance

There were no environmental prosecutions at Marshalls' sites during 2015.

Verification



This Environmental KPI Report has been audited by a qualified verifier on behalf of BSI. On the basis of the work undertaken, it is considered to be a fair reflection of the environmental performance of the organisation during 2015 and contains no misleading information.



Marshalls' Sawn Versuro



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