

# Review of the year

(continued)

## Climate change



← **Energy efficient lighting**  
Last year, we installed around 200 energy efficient lighting schemes in our stores

**Our planet is getting warmer – mainly because of an increase in greenhouse gas emissions produced by human activity – with many damaging consequences. Climate change is a global challenge but one that we're helping to address.**

To see our performance against these commitments in detail please go to page 28.

### Staying carbon neutral

In 2012 M&S operated stores, offices, warehouses and delivery fleets in the UK and Republic of Ireland became carbon neutral, making us the first major retailer to achieve this. In 2012/13 we continued to improve efficiency and purchased high quality carbon offsets to match our emissions, so we remain the only major retailer with carbon neutral operations.

### Reducing our carbon emissions

By the end of this year, we'd reduced our CO<sub>2</sub>e emissions by 23% compared to 2006/07. That's a reduction of over 160,000 tonnes a year or 37% per square foot of our stores, distribution centres and offices.

We've also reduced emissions from store refrigeration systems by 60% and maintained improved fuel efficiency in our delivery fleets of over 30%.

We're working with our suppliers and the UK's Product Sustainability Forum, Sustainable Clothing Action Plan and The Sustainability Consortium to reduce product related emissions.

### Improving our energy efficiency

The story behind our continuing reductions in CO<sub>2</sub>e emissions features a number of achievements. These include a 31% improvement in overall energy efficiency per square foot compared to 2006/07, after making adjustments for differences in the weather from year to year. We've achieved this by making gradual improvements. By the end of 2012/13 we'd installed around 200 energy efficient store lighting schemes and cut CO<sub>2</sub>e emissions from our refrigerators by 60% thanks to fewer leaks and less harmful gases.

We're proud that M&S is the first major UK retailer to be certified to the ISO 50001 global energy management standard.

At the same time we know that we still face challenges. For example, we're struggling to meet our target to reduce business flights by 20%, achieving only 7% so far – which means we'll need to work a lot harder over the next 12 months.

### Key achievements compared to 2006/07

**31%**  
improvement in energy efficiency per square foot (after adjustments for weather)

**23%**  
reduction in CO<sub>2</sub>e emissions

**60%**  
reduction in CO<sub>2</sub>e emissions from refrigeration

**1st**  
major UK retailer to achieve ISO 50001 energy management accreditation



Through the purchase of high quality carbon offsets we're helping to fund a range of global projects to reduce carbon emissions.

These include reforestation projects in Kenya, Malaysia and Brazil.

### Kasigau Corridor, Kenya

As part of the United Nations backed Reduced Emissions from Deforestation and Degradation, or REDD programme, we're helping to fund conservation of the forest corridor in south east Kenya.

# Pillar 3: Climate change

This section shows our detailed performance against our Pillar 3 commitments. Each commitment is shown as Achieved, On plan, Behind plan or Not achieved.

### Why is this important?

Our planet is getting warmer – mainly because of an increase in greenhouse gas emissions produced by human activity – with many damaging consequences. Climate change is a global challenge but one that we're helping to address.

### What have we done?

We've cut our emissions in both absolute terms (-23%) and by carbon intensity (-37%). However, we've also gone much further by buying high quality carbon offsets. M&S operated stores, offices, warehouses and delivery fleets in the UK and Republic of Ireland are carbon neutral. We believe that we remain the only major retailer in the world to have achieved this.

### Highlights this year

**31%**

improvement in store, office and warehouse energy efficiency per sq ft against 2006/07 (after weather adjustment)

**23%**

reduction in CO<sub>2</sub>e emissions against 2006/07

**60%**

reduction in CO<sub>2</sub>e emissions from refrigeration against 2006/07

**ISO 50001**

Energy Management certification

## 9. Help our customers cut their carbon footprint.

**9.1** Six low carbon projects  
**Previously achieved**

We've committed to support a third phase of the Courtauld Commitment partnership running to year end 2015.

The continued use of packaging design software helped us reduce the carbon footprint of our 2013 Easter range by 16% per tonne of packaging.

**9.4** Carbon labelling  
**Previously achieved**

**9.5** Low carbon products and services  
**Previously achieved**

**9.6** WWF carbon footprint campaign  
**Previously achieved**

**9.7** Wash at 30  
**Previously achieved**

**9.8** Public transport and cycling  
**Previously achieved**

**9.2** Environmentally efficient food packaging\*\*  
**On plan**

**Aim:** Use the most environmentally efficient forms of packaging systems throughout the supply chain to help reduce the overall carbon footprint of packaging and products by 2015.

**Progress:** As part of Waste Resources Action Programme (WRAP)'s Courtauld Commitment 2 initiative we've contributed towards an overall reduction of 8% in the carbon footprint of packaging used in the UK (for 2011 against 2009). Our progress was slightly behind the industry average but is in addition to improvements already achieved between 2007 and 2009.

**9.3** Energy efficient electrical products  
**Cancelled**

**Aim:** Ensure that by 2015 at least 90% of our household electrical products meet a credible energy efficiency standard and improve the energy efficiency of the most energy intensive products by at least 25%.

**Progress:** This commitment is no longer relevant as we have stopped selling the products it covered. We'll revise it accordingly if we decide to reintroduce similar product ranges in the future.

## 10. Reduce our operational carbon emissions by 35% and make our operations carbon neutral.

**10.1** Energy use in data centres  
**Previously achieved**

**10.2** Video conferencing  
**Previously achieved**

**10.3** International logistics (part 2)  
**Behind plan**

**Aim:** To transport 50% of International General Merchandise products directly to their retail destinations in 2011/12 and 80% in 2013/14 rather than routing through the UK.

**Progress:** This year, around 36% of General Merchandise products (measured by volume) destined for our International business were transported directly. This commitment has remained Behind plan due to significant increases of sales through our international stores and changes to our plans for how we transport some types of products. As a result, we have reworded this commitment:

*Aim to transport 70% of International General Merchandise products directly to their retail destinations by the end of 2015/16 rather than routing through the UK.*

**10.4** Carbon neutral operations\*\*  
**Previously achieved/ongoing**

**Aim:** To move all our UK and Republic of Ireland operations (stores, offices, warehouses, business travel and logistics) to be carbon neutral by 2012. Also an Annual Report KPI.

**Progress:** This year our gross CO<sub>2</sub>e emissions were 569,000 tonnes, down by 23%, or over 160,000 tonnes compared with 735,000 tonnes in 2006/07. This is mainly due to more efficient electricity use, reduced gas leaks from refrigeration and better waste recycling levels. We achieved this reduction despite reporting an additional ^16,000 tonnes of emissions this year from transport activities previously accounted for by suppliers.

To remain carbon neutral, we've offset our gross emissions for 2012/13 through the purchase and retirement of high quality carbon offsets.

### Direct emissions from M&S operations (scope 1)

	2006/07 000 t CO <sub>2</sub> e	2012/13 000 t CO <sub>2</sub> e	% change 2006/07
Store and office refrigeration and air-conditioning gases	129	51	-60
Logistics transport and dedicated home deliveries	61	^75	+23
Warehouse refrigeration gases	6	4	-33
Stores, office and warehouse on-site fuel usage	48	51	+6
Sub-Total	244	181	-26

### Indirect emissions from M&S energy usage (scope 2)

	2006/07 000 t CO <sub>2</sub> e	2012/13 000 t CO <sub>2</sub> e	% change 2006/07
Stores and office energy usage	402	336	-16
Warehouse energy usage	39	35	-10
Sub-Total	441	371	-16

### Other indirect emissions (scope 3)

	2006/07 000 t CO <sub>2</sub> e	2012/13 000 t CO <sub>2</sub> e	% change 2006/07
Business travel	10	15	+50
Waste disposal	40	2	-95
Sub-Total	50	17	-66

	2006/07 000 t CO <sub>2</sub> e	2012/13 000 t CO <sub>2</sub> e	% change 2006/07
Total Gross CO <sub>2</sub> e emissions	735	569	-23
Total Gross CO <sub>2</sub> e emissions tonnes/sq ft of sales floor	54	34	-37

### Net emissions (after offsetting)

	2006/07 000 t CO <sub>2</sub> e	2012/13 000 t CO <sub>2</sub> e	% change 2006/07
Carbon offsets	0	569	-
Total Net CO <sub>2</sub> e emissions	735	0	-

### Operational CO<sub>2</sub>e emissions

Emissions are shown in compliance with the WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard Revised and have been calculated using revised carbon conversion factors published by DECC/DEFRA in May 2012 and Bitzer Report 17 for additional refrigeration gases. This includes all the activities where we have operational control. It excludes all non-metered premises, shopping service contract supplies and Republic of Ireland business travel.

2006/07 baseline emission for waste uses data from 2008/09 which was the first year we had calculated this figure.

**10.5**

Energy efficiency (part 2)\*\*  
**On plan**

**Aim:** Reduce store, office and warehouse energy usage by 25%/sq ft by 2012 (Previously achieved).

**Reduce store, office and warehouse energy usage by 35% per sq ft by 2015.**

**Progress:** This year, total energy efficiency across our stores, offices and warehouses has improved by 31% to 39.6 kWh/sq ft (2006/07: 57.4 kWh per sq ft).

Store energy efficiency improved by 32% to 45.9 kWh per sq ft compared to 2006/07 (67.9 kWh per sq ft). Gas usage included in our calculation has been adjusted using standard degree days to reflect changes in the number of cold days (51.2 kWh per sq ft before adjustment). In 2012/13 we installed improved lighting schemes in around 200 stores and were certified to the ISO 50001 international standard for Energy Management.

Energy efficiency in our warehouses declined slightly from last year although is still 26% better at 19.6 kWh/sq ft compared to 26.4 kWh/sq ft in 2006/07. Energy use in our offices is improved by 6% at 46.4 kWh/sq ft (2006/07: 49.4 kWh/sq ft).

	2006/07 Actual	2012/13 Actual	2015 Target	Change
57.4	39.6	37.3	-31%	

**Energy efficiency** Total store, office and warehouse energy usage in kWh/sq ft

**10.6**

Fuel efficiency (part 2)\*\*  
**On plan**

**Aim:** Achieving a 20% improvement in fuel efficiency in our deliveries to stores by 2012 (Previously achieved).

**Achieving a 35% improvement in fuel efficiency in our deliveries to stores by 2015.**

**Progress:** This year, fuel efficiency for our Food store deliveries was 1,775 litres per store, down by 31% compared with 2,556 litres per store in 2006/07.

We maintained the fuel efficiency improvement in our General Merchandise delivery fleet at 30% on 2006/07 or 7 litres per 1,000 singles (2006/07: 10 litres per 1,000 singles). These deliveries account for around 8,000 tonnes of our annual CO<sub>2</sub>e emissions. In Scotland, we introduced shared General Merchandise warehousing

and deliveries, working with another major clothing retailer to improve overall efficiencies.

Due to the merging of other General Merchandise transport activities such as collections from suppliers and the trunking of products between warehouses into a single fleet this is the last year that we will be able to calculate a separate store delivery measurement. These activities were previously carried out by suppliers and sub-contractors and have added around 16,000 tonnes to our annual CO<sub>2</sub>e emissions. We believe the changes have achieved greater emissions savings overall.

10.7

**Reduce business flights**  
Behind plan

**Aim:** Reduce business flights by an average of 20% per employee by 2013.

**Progress:** This year, we achieved an average of 0.39 flights per UK Full Time Equivalent employee, a reduction of 7% on our 2007/08 baseline figure of 0.42 flights. In July 2012, we revised our travel policy, stipulating that air travel can't be used for any journeys that could be made in under three hours in the UK or using Eurostar.

10.8 Green company car policy  
**Previously achieved**

10.9 Green electricity  
**Previously achieved**

10.10 On-site renewables  
**Previously achieved**

10.11 Bio-diesel  
**Not achieved**

10.12 New transport technologies  
**Previously achieved**

10.13 EURO engines  
**Previously achieved**

10.14 Carbon offsetting policy  
**Previously achieved**

10.15

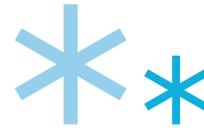
**Store refrigeration\*\***  
On plan

**Aim:** Reducing store refrigeration gas carbon emissions by 50% by 2015. Using CO<sub>2</sub> systems in all new store refrigeration installations from 2010, replace HCFCs by 2014 and HFCs by 2030.

**Progress:** This year, our emissions from refrigeration and air-conditioning were 51,000 tonnes CO<sub>2</sub>e, down by 60% compared with 129,000 tonnes CO<sub>2</sub>e in 2006/07. Allowing for increases in store footage, emissions were down 67% at 3.1 tonnes CO<sub>2</sub>e/1,000 sq ft (2006/07: 9.4 tonnes CO<sub>2</sub>e/1,000 sq ft). We've achieved these reductions by improving maintenance and introducing less damaging R407a HFC gases. This means

that the first two parts of this commitment are now Achieved.

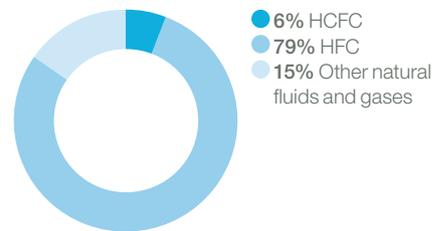
Store refrigeration and air conditioning emissions in tonnes CO<sub>2</sub> per 1,000 sq ft



2006/07 Actual	2012/13 Actual	2015 Target	Change
9.4	3.1	4.7	-67%

76 of our stores now use CO<sub>2</sub> refrigeration systems. A further 449 use less damaging HFCs (R407a) as an interim measure until we complete the roll out of CO<sub>2</sub> systems.

Refrigeration and air-conditioning gases in use in M&S stores



**11. Help our suppliers cut their carbon emissions.**

11.1 Supply change climate adaptation  
**Previously achieved**

11.2

**Food factory environmental standard\*\***  
On plan

**Aim:** Work with M&S food suppliers to ensure that all factories have an environmental action plan, so that by 2015, 25% of M&S food (by turnover) will be produced by factories that have improved energy efficiency by at least 20%.

**Progress:** By the end of the year, 31 suppliers accounting for 9% of M&S Food turnover had an environmental action plan and had improved energy efficiency by 20% (against a previous baseline) when assessed using our Food Supplier Sustainability Framework.

11.3 Electricity from small-scale generators  
**Previously achieved**

11.4 Supplier logistics  
**Previously achieved**

11.5 Food carbon footprint  
**Previously achieved**

11.6 Minimise food airfreight  
**Previously achieved**

11.7 Supplier Exchange – reducing CO<sub>2</sub>  
**Previously achieved**

11.8 Green factories  
**Previously achieved**

11.9 Agricultural carbon balance  
**Previously achieved**

11.10 Air freight labelling  
**Previously achieved**

\*\*Assured by Ernst & Young