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Plan A planet

M&S greenhouse emissions and climate change performance 2017/18

M&S climate strategy

In June 2017, M&S published a Science Based Target initiative approved target of:

Marks & Spencer commits to reduce absolute scope 1 and 2 greenhouse gas emissions 80% by 2030 below 2007 levels and has a longer-term vision to achieve 90% absolute emissions reductions by 2035, below 2007 levels. Marks & Spencer also commits to reduce scope 3emissions by 13.3 MtCO2e between 2017 and 2030.

This target is in line with a 1.5C degree scenario.

Since 2014, M&S has also been the only major retailer with carbon neutral global operations and we plan to maintain this position up to at least 2024/25.

Costs and regulation

Marks & Spencer is classified by regulation as a large non-intensive user of carbon. Energy currently represents a cost equivalent to around 1% of turnover or around 17% of pre tax profits. Our main areas of climate change regulation are building regulations, the Climate Change Levy (a carbon tax payable on energy contracts), the Carbon Reduction Commitment Energy Efficiency Scheme and the Energy Savings Opportunity Scheme (ESOS). Our use of refrigeration gases is also regulated under the EU F-Gas Regulations.

Voluntary Collaborations

Marks & Spencer participates in a wide range of voluntary collaborations addressing climate change. These include pro-environmental lobbying through the UK Green Building Council and The Aldersgate Group and in shared GHG reduction targets as part of the Consumer Goods Forum sustainability programme, EU Retail Environmental Actions Programme (REAP), the British Retail Consortium's 'Better World, Better Retail', WRAP's Courtauld Commitment 2025 and Sustainable Clothing Action Plan.

Certifications

We became the first major retailer to gain certification to ISO50001 on energy management in 2013 (renewed in 2015) and the first retailer to hold Carbon Trust Standards on carbon, water and waste in 2014. Carbon neutrality is certified using PAS2060: 2014.

M&S climate governance

A full description of our governance processes on climate change and other environmental and social issues can be found in our 2018 Plan A Report on pages 38-39.

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M&S climate risks, opportunity & mitigations

Our approach to risk management and principle risks and uncertainties are detailed in our 2018 Annual Report. Climate change is not considered to be a principal risk but is regarded as contributory factor towards an overall risk of meeting stakeholder expectations (Corporate compliance and responsibility).

By definition, the more detailed climate based issues are therefore currently considered as relatively low risk/ materiality:

Issue	Potential risk	Potential opportunity	Financial implications
Absence of strong international agreements	Increased direct and in-direct costs	None	Unknown
Taxation of carbon	Increased direct and in-direct costs Inconsistent application	Reducing carbon intensity also reduces exposure to this risk. There is also a competitive opportunity afforded by efficiency.	A shadow price of £29/ tonne could increase direct costs by around £5m p.a.
Revisions to UK and EU energy and climate regulations	Increased direct and in-direct costs	None	Unknown
Product labelling regulations and standards	Increased direct and in-direct costs	Developing experience and expertise in product footprinting can mitigate this risk. In turn, this can generate opportunities in innovation.	Unknown
Change in mean (average) temperature	Increased direct costs (due to higher use of air-conditioning) Potential disruption and relocation of raw material supply chains	Reducing carbon intensity also reduces exposure to this risk. Actions with suppliers to mitigate risks may provide longer-term competitive advantages.	Unknown
Uncertainty of physical risks	Increased likelihood of harm to people, physical assets and disruption to business continuity.	Adaptation plans can mitigate risks and provide competitive opportunities.	Unknown (current operational losses through extreme weather events are low).
Reputation	M&S performance falls below the expectations of customers and opinion formers	Our Plan A commitments are designed to mitigate risks and realise opportunities.	Unknown
Changing consumer behaviour	Loss of turnover and profit	There is currently little evidence of impact in our core Food and Clothing sectors consumer markets.	Unknown
Increasing humanitarian demands	Requests or requirements for financial support for affected parts of our supply chains.	Our Global Community Programme addresses these impacts and provides longer-term competitive advantages.	Unknown

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M&S positions on public policy

M&S is an advocate of effective, proportionate and fair regulation on climate change issues. We supported the need for mandatory GHG reporting in the UK and for ambitious legally binding emissions reduction and energy efficient targets in the UK, EU and globally. Individual M&S submissions can be found at:

https://corporate.marksandspencer.com/plan-a/our-approach/delivering-plan-a/leading-with-others-to-accelerate-change/advocacy/government-consultations

Performance 2017/18

Emissions are reported annually in our Plan A Report and Annual Report in June each year covering the previous financial year running April-March. These are calculated in accordance with the WRI/ WBCSD GHG Corporate Reporting and Accounting Standard (revised) using BEIS carbon conversion factors and IEA and Bitzer for additional factors. Data includes all activities where we have operational control and is drawn from our annual Plan A Report which is independently assured to a 'limited' level By DNV GL using their VeriSustain protocol.

We have also adopted the 2015 WRI/ WBCSD Scope 2 Guidance on procured renewable energy. This means that in addition to the gross/ Location-based figure required by legislation in the UK and most GHG benchmarks, we also calculate a Market-based figure allowing from deductions from the procurement of renewable electricity and bio-methane gas.

This lower Market-based figure is what some companies also present as being their emissions in voluntary reporting.

We then match these remaining market-based emissions with the procuring and retirement of high quality carbon offsets to achieve a position of zero net emissions (carbon neutral).

For our efficiency Index we use 'per area of sales floor' which reflects the Index used by our main trade association the British Retail Consortium and is also accepted by the Carbon Trust. Whilst indexes showing per £m have some advocates, we've found that they are too readily influenced by inflation/ deflation and changes of product mix. Per 'area of sales floor' has so far proven to be a robust measurement of progress and is the metric we use internally but maybe subject to review as the retail industry re-structures with a greater proportion of sales conducted online.

Key 2017/18 performance compared to 2006/07

Location-based	Inc/dec
Global Scope 1+ 2 GHG emissions	**-33%**
Global Scope 1+ 2 GHG emissions per sq ft	**-43%**

Market-based	
Global Scope 1+ 2 GHG emissions	**-75%**
Global Scope 1+ 2 GHG emissions per sq ft	**-80%**

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UK and ROI Location-based (gross) emissions
(original scope of Plan A when launched in 2007)

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating	39	38	36	34	37	39
Store & office fridge & air con	129	41	43	59	56	54
Warehouse gas heating	9	6	5	7	6	6
Warehouse fridge & air con	6	3	2	2	2	1
Delivery transport fuel	62	78*	79*	78*	81*	80*
(Direct) Scope 1	245	167	165	180	183	180
Store & office electricity	334	283	304	274	247	208
Warehouse electricity	33	30	34	30	26	25
(In-direct) Scope 2	367	313	338	304	273	233
Total Scopes 1& 2	**612**	**481**	**504**	**484**	**456**	**413**
Index /1000 sq ft of sales floor	**45**	**29**	**30**	**28**	**26**	**23**
Electricity T&D	31	27	30	25	25	22
Fuel use T&D (from 2011)		1	1	2	2	2
Business travel	15	22	20	21	14	13
Waste	40	2	2	2	2	2
(Other) Scope 3	86	52	52	50	42	38
Total Scopes 1, 2 &3	698	533	555	534	499	452
Index /1000 sq ft of sales floor	51	32	33	31	28	26

*Includes additional transport activities previously carried-out by suppliers.

UK Location-based (gross) emissions
(individual UK emissions only measured from 2014/15)

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating			33	32	35	36
Store & office fridge & air con			43	56	54	52
Warehouse gas heating			5	7	6	6
Warehouse fridge & air con			2	2	2	1
Delivery transport fuel			76	76	79	80
(Direct) Scope 1			159	173	177	173
Store & office electricity			294	265	237	200
Warehouse electricity			34	30	26	25
(In-direct) Scope 2			328	295	263	225
Total Scopes 1& 2			**487**	**468**	**440**	**397**
Electricity T&D			29	24	24	21
Fuel use T&D (from 2011)			0	2	2	2
Business travel			19	21	14	13
Waste			2	2	2	2
(Other) Scope 3			50	49	41	37
Total Scopes 1, 2 &3			537	517	481	435

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ROI Location-based (gross) emissions
(individual ROI emissions only measured from 2014/15)

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating			3	2	2	2
Store & office fridge & air con			1	2	2	3
Warehouse gas heating			0	0	0	0
Warehouse fridge & air con			0	0	0	0
Delivery transport fuel			3	3	2	3
(Direct) Scope 1			7	7	6	8
Store & office electricity			10	10	10	8
Warehouse electricity			0	0	0	0
(In-direct) Scope 2			10	10	10	8
Total Scopes 1& 2			17	17	17	16
Electricity T&D			1	1	1	1
Fuel use T&D (from 2011)			0	0	0	0
Business travel			0	0	0	0
Waste			0	0	0	0
(Other) Scope 3			1	1	1	1
Total Scopes 1, 2 &3			18	18	18	17

Other international Location-based (gross) emissions

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating	0	0	0	0	0	0
Store & office fridge & air con	1	1	2	2	2	1
Warehouse gas heating	0	0	0	0	0	0
Warehouse fridge & air con	0	0	0	0	0	0
Delivery transport fuel	0	0	0	0	0	0
(Direct) Scope 1	1	1	2	2	2	1
Store & office electricity	26	26	28	22	20	15
Warehouse electricity	1	1	1	2	0	0
(In-direct) Scope 2	28	28	29	24	20	15
Total Scopes 1& 2	29	29	31	26	22	16
Index /1000 sq ft of sales floor	12	12	11	10	9	12
Electricity T&D	3	3	3	2	2	2
Fuel use T&D (from 2011)	0	0	0	0	0	0
Business travel	3	3	3	3	3	1
Waste	0	0	0	0	0	0
(Other) Scope 3	6	6	6	5	5	3
Total Scopes 1, 2 &3	35	35	37	31	27	19
Index /1000 sq ft of sales floor	14	14	13	13	11	14

GHG emissions for 2006/07 to 2012/13 are estimated based on 2013/14.

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M&S global Location-based (gross) emissions

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating	39	38	36	34	37	39
Store & office fridge & air con	130	42	45	61	58	55
Warehouse gas heating	9	7	5	7	6	6
Warehouse fridge & air con	6	3	2	2	2	1
Delivery transport fuel	62	78	79	78	82	80
(Direct) Scope 1	246	168	167	182	185	181
Store & office electricity	360	309	332	296	267	223
Warehouse electricity	34	30	35	32	26	25
(In-direct) Scope 2	394	339	367	328	293	248
Total Scopes 1& 2	639	508	534	510	479	430
Index /1000 sq ft of sales floor	40	27	27	26	24	23
Electricity T&D	34	30	32	27	27	23
Fuel use T&D (from 2011)	0	2	1	2	2	2
Business travel	18	25	23	24	17	14
Waste	40	2	2	2	2	2
(Other) Scope 3	92	58	58	55	48	41
Total Scopes 1, 2 &3	732	566	592	566	526	471
Index /1000 sq ft of sales floor	46	30	30	29	26	25

M&S global Market-based emissions

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Store & office gas heating	39	38	30	28	26	14
Store & office fridge & air con	130	42	45	61	58	55
Warehouse gas heating	9	7	5	7	6	6
Warehouse fridge & air con	6	3	2	2	2	1
Delivery transport fuel	62	78	79	78	82	80
(Direct) Scope 1	246	168	161	176	173	157
Store & office electricity	360	26	28	22	0	0
Warehouse electricity	34	12	13	13	0	0
(In-direct) Scope 2	394	38	41	35	0	0
Total Scopes 1& 2	639	206	201	211	173	157
Index /1000 sq ft of sales floor	40	11	10	11	9	8
Electricity T&D	34	30	32	27	27	23
Fuel use T&D (from 2011)	0	2	1	2	2	2
Business travel	18	25	23	24	17	14
Waste	40	2	2	2	2	2
(Other) Scope 3	92	58	58	55	48	41
Total Scopes 1, 2 &3	732	265	259	266	221	198
Index /1000 sq ft of sales floor	46	14	13	14	11	10

M&S global net emissions

000 tonnes CO2e	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Market-based scopes 1 and 2	639	206	201	211	173	157
Carbon offsets	0	206	201	211	173	157
Net/ marketplace emissions	732	0	0	0	0	0

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Other M&S scope 3 emissions

The additional scope 3 emissions below have been 'modelled' using a range of different techniques. As such they provide a scale and identification of 'hotspots' which we are now addressing. However, these figures are not sufficiently accurate to monitor incremental improvements.

Source	Activity	Estimated GHG emissions
M&S Food products	Supply chain	2.7m tCO2e
M&S Clothing products	Supply chain	2.0m tCO2e
M&S Home products		0.4mtCO2e
Procurement of capital goods	Embodied carbon in stores, equipment and consumables/	0.2m tCO2e
Upstream transportation	Supply chain distribution	0.2m tCO2e
M&S Food products	Customer use	0.1m tCO2e
M&S Clothing products	Customer use	0.5m tCO2e
Customer travel	Customer travel and deliveries of M&S products	0.1m t CO2e
Employee commuting	Employee commuting	0.01m CO2e
M&S franchise partners	UK and overseas franchised stores and M&S operated store outside of operational control	0.15m tCO2e
M&S footprint (scope 3)	**Total estimated M&S carbon footprint (all activities)**	**£6m t CO2e**

M&S energy & fuel consumption

UK and Republic of Ireland (matching the scope of our Plan A commitments)

	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Electricity in GWh	822	702	687	665	666	666
Gas in GWh	257	206	219	220	236	234
Energy in GWh	1079	908	906	885	902	900
GWh/ sq ft of salesfloor	79	54	53	52	51	51
Transport fuel diesel in m litres	23	29*	30*	30*	31*	30*

*Includes additional transport activities previously carried-out by suppliers.

Other international locations

	2006/07	2013/14	2014/15	2015/16	2015/16	2017/18
Electricity in GWh		44	47	40	35	26
Gas in GWh		0	0	0	0	0
Energy in GWh		44	47	40	35	26
GWh/ sq ft of salesfloor		26	23	23	22	21
Transport fuel diesel in m litres		0	0	0	0	0

Global

	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Electricity in GWh		744	735	705	701	693
Gas in GWh		206	219	220	236	234
Energy in GWh		950	954	925	937	927
GWh/ sq ft of salesfloor		37	35	34	34	35
Transport fuel diesel in m litres	23	29*	30*	30*	30*	30*

*Includes additional transport activities previously carried-out by suppliers.

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M&S energy efficiency

UK and Republic of Ireland (after weather adjustments for stores)

	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Stores in kWh/ sq ft	67.9	45.3	44.4	41.7	42.3	40.8
Offices in kWh/ sq ft	49.4	39.6	38.2	33.5	31.8	43.8
Clothing w/hses in kWh/ sq ft	24.5	15.5	14.2	15.6	14.6	15.5
Food w/hses in kWh/ sq ft	33	21.1	19.8	20.0	19.0	18.0
All in kwh/sq ft	**57.4**	**37.6**	**36.8**	**34.9**	**35.1**	**34.4**

Other international locations

	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Stores in kWh/ sq ft		27.9	26.8	27.5	25.5	24.3
Clothing w/hses in kWh/ sq ft		9.0	5.7	6.9	2.1	2.7

M&S renewable energy sourcing

UK and Republic of Ireland (matching the scope of our Plan A commitments)

Electricity	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Total electricity in GWh	822	702	687	665	666	666
'Green' in GWh	23	687	664	640	666	666
% 'green'	2	97	97	96	100	100

Gas	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Total gas in GWh	257	206	219	220	236	234
Bio-methane in GWh	0	0	33	34	64	133
% 'green'	0	0	15	15	27	57

Global

Electricity	2006/07	2013/14	2014/15	2015/16	2016/17	2017/18
Total electricity in GWh		746	735	705	701	693
'Green' in GWh		687	664	640	701	693
% 'green'		92	90	91	100	100

M&S procurement of high quality carbon offsets for 2017/18

The offsets below were purchased and retired for the purposes of voluntary offsetting.

Name of project	Project type	Verification standard	Tonnes of CO2e
Brazil	REDD+ (Acre)	Gold Standard	8,484
China (Wuhe)	Biomass	VCS (Verified Carbon Standard)	180
Madagascar	REDD+ (Makira)	Gold Standard	2,123
India Wind (Jath)	Wind	VCS (Verified Carbon Standard)	78,488
UNICEF Kenya Cookstoves	Energy efficiency: households	Gold Standard	20,000
Kenya Cookstoves	Energy efficiency: households	Gold Standard	6,386
Meru & Nanyuki	Forests	VCS (Verified Carbon Standard)	15,766
Indonesia (Pangelengen)	Geothermal	VCS (Verified Carbon Standard)	23,000