

Sustainable Clothing Action Plan

(update Feb 2010)



Growing consumer demand
UK Clothing
£23 billion/annum

90% imported

Short lifespan of products
Fast fashion 1/5 of market

Where we shop
chains, online,
supermarkets

Quickly changing
consumer preferences

Global population
2050 –
9 billion



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Executive Summary

This is the **Action Plan** for the **Sustainable Clothing Roadmap** setting out agreed stakeholder actions in the following five key areas to improve the sustainability performance of clothing.

1. Improving Environmental Performance across the Supply Chain
 - Sustainable Design
 - Fibres and Fabrics
 - Maximising Reuse, Recycling and end of life management
 - Clothes Cleaning
2. Consumption trends and behaviour
3. Awareness, media, education and networks
4. Creating market drivers for sustainable clothing
5. Instruments for improving traceability along the supply chain (ethics, trade and environment).

Launched in Sept 2007, the Sustainable Clothing Roadmap aims to improve the sustainability of clothing, by gathering evidence on the environmental, social and economic impacts, and working with a wide range of stakeholders across the clothing supply chain to build on existing interventions and add value to work already underway.

The reason for the roadmap is because clothing, while an economic success story (globally worth over £500 billion), has a significant environmental and social footprint across its supply chain which is exacerbated by high consumption levels, in particular in the developed world. In the UK alone about 2 million tonnes (value £23 billion) of clothing are purchased per annum, with the fast/discount fashion sector (characterised by low cost, short lifetime garments) making up one-fifth of the UK market. The environmental impacts include:

- Energy use and generation of Greenhouse Gas (GHG) emissions from washing (water heating) and drying of clothing.
- Energy use, resource depletion and generation of GHG emissions from processing fossil fuels into synthetic fibres.
- Significant water use, toxicity from fertiliser, pesticide and herbicide use, energy use and GHG emissions associated with fertiliser generation and irrigation systems from fibre crops, e.g. cotton
- Water use, toxicity, hazardous waste and effluent associated with production stage pre-treatment chemicals, dyes and finishes
- In the UK, 2 million tonnes of textiles are consumed per annum with approx 50% destined for landfill. Of this, over 1 million tonnes is clothing, with the remainder being domestic carpets, household fabric and footwear. Approximately 0.5 million tonnes of textiles is collected for reuse or recycling.

As 90% of UK clothing is imported, many of the significant impacts are occurring overseas as well as in the UK. Social impacts include labour exploitation, in particular child labour and poor working conditions, trade inequities and animal welfare. The roadmap action plan will be successful if it stimulates the clothing and fashion industry to take increasing actions in the five key areas, where it can be most effective.

Executive Summary

Led by Defra, the roadmap is based on the co-ordinated action of key clothing and fashion stakeholders as they can affect the most improvement through their operations. Nearly 300 stakeholder organisations along the supply chain of UK consumed clothing have participated in the roadmap to date to include clothing retailers, fibre/fabric/garment manufacturers, suppliers, clothing reuse and recycling organisations, charities, industry associations, government, NGOs, practitioners, academia and support organisations. Building on what organisations have already done, the roadmap is based on stakeholder co-operation and agreed commitments to enable the improvement process to accelerate at a quicker rate.

Since its launch, key milestones achieved to date are evidence gathering, awareness raising and extensive stakeholder consultation on the sustainability impacts and where actions would be most effective. On this baseline the action plan has been agreed and steering and expert groups formed to follow the progress of these actions going forward. Background on the roadmap activities and publications to date are at <http://www.defra.gov.uk/environment/business/products/roadmaps/clothing/index.htm>

The next steps are implementation of the actions and dissemination of their best practices to stimulate other companies to take similar actions.

This clothing roadmap is one of ten being trialled on a range of products in priority areas under the UK government actions on Sustainable Consumption and Production. More information on SCP and the roadmaps is at <http://www.defra.gov.uk/environment/business/scp/index.htm>

There is a growing business case for improving the sustainability of clothing – as evidenced by a range of market initiatives for example fair trade and organic initiatives now running in over 150 UK retail outlets, increasing sustainable design presence in the UK fashion industry e.g. at London Fashion Week's Estethica sustainable design platform, as well as consumers' growing awareness of the environmental and social impacts associated with clothing. The Roadmap aims to build on this momentum with the UK taking a leading role.

The roadmap action plan is intended to be a 'living document' that will be reviewed periodically. This allows progress towards targets to be monitored and makes it possible to revise and update the actions in the light of new evidence, stakeholders and technology.

1. Introduction

1.1 What is the Sustainable Clothing Roadmap?

The Sustainable Clothing Roadmap aims to improve the environmental and social performance of clothing, building on existing initiatives and by co-ordinating action by key clothing supply chain stakeholders. Although organisations in the clothing supply chain have already taken significant steps to reduce adverse environmental and social impacts, further industry-wide co-operation and agreed commitments will enable that process to accelerate. That is the rationale behind the collaborative nature of the roadmap.

1.2 Why Clothing and what is “unsustainable” about it?

The clothing industry is a high value sector, globally worth over £500 billion, employing approximately 26 million people and supporting a significant number of economies and individual incomes around the world. This economic success story also has a significant adverse environmental and social “footprint” across its global lifecycle – with rising consumption being a key factor in this.

What are the Environmental and Social Impacts of Clothing?

These vary with the fibre type(s) the garment is made from as well as a range of other factors. However, it is the high consumption of clothing, mainly in the developed world, that exacerbates the impacts per garment and has identified clothing as a priority. For example, in the UK alone 2 million tonnes of clothing are consumed per annum at a value of £23 billion¹. The fast or discount fashion clothing sector makes up one fifth of the UK market and the sector has doubled its growth over the last 8-10 years. Across its supply chain, the environmental impacts of clothing include:

- Energy use and generation of Greenhouse Gas (GHG) emissions from washing (water heating) and drying of clothing;
- Energy use, resource depletion and generation of GHG emissions from processing fossil fuels into synthetic fibres e.g. polyester or nylon;
- Significant water use, toxicity from fertiliser, pesticide and herbicide use, energy use and GHG emissions associated with fertiliser generation and irrigation systems from fibre crops, e.g. cotton;
- Water use, toxicity, hazardous waste and effluent associated with production stage pre-treatment chemicals, dyes and finishes;
- In the UK, 2 million tonnes of textiles are consumed per annum with approx 50% destined for landfill. Of this, over 1 million tonnes is clothing, with the remainder being domestic carpets, household fabric and footwear. Approximately 0.5 million tonnes of textiles is collected for reuse or recycling.

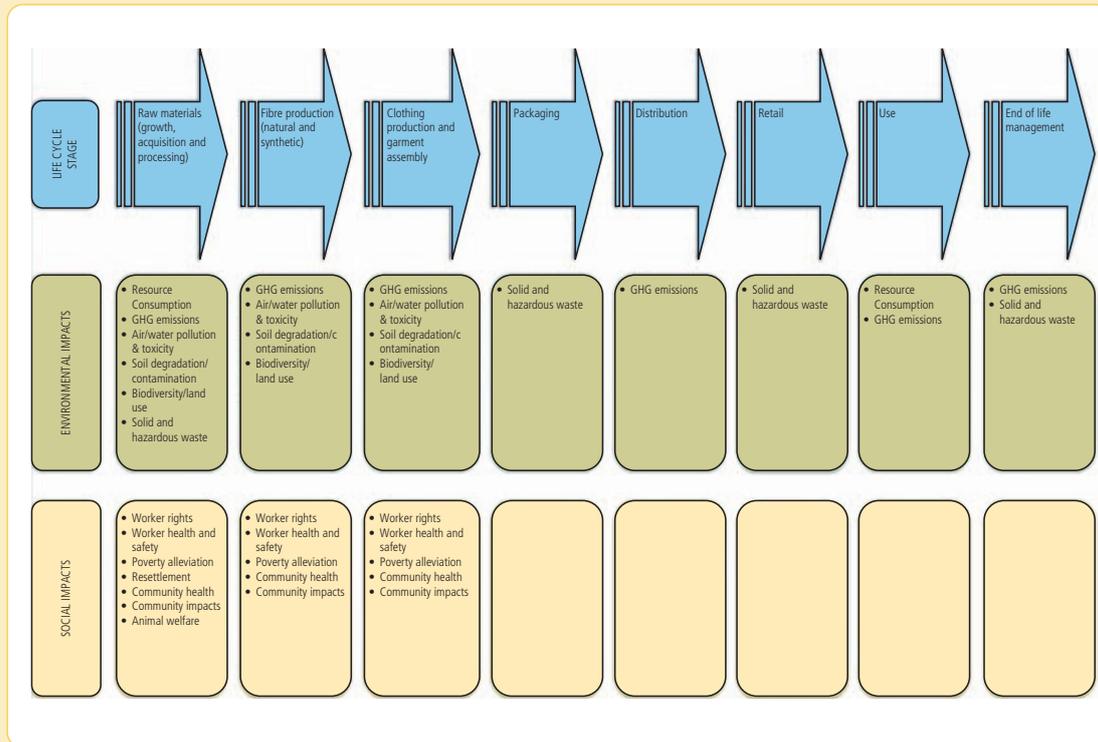
Social Impacts include:

- Poor working conditions including child labour and sweatshop conditions e.g. low wages, long hours, non respect of workers’ rights and health and safety risks;
- Limited market access, information and trade terms for farmers and workers leading to inequitable trading conditions;
- Animal welfare for sheep, cows and fur producing animals used in garments.

¹ As of 2006

Given the complex, global clothing supply chain (characterised by sub contractors in the developing world and the use of migrant workers), transparency on social and environmental criteria is an ongoing challenge.

Environmental and Social impacts across the life cycle of clothing (Source: modified from Defra, 2007²)



1.3 What is "Sustainable" Clothing?

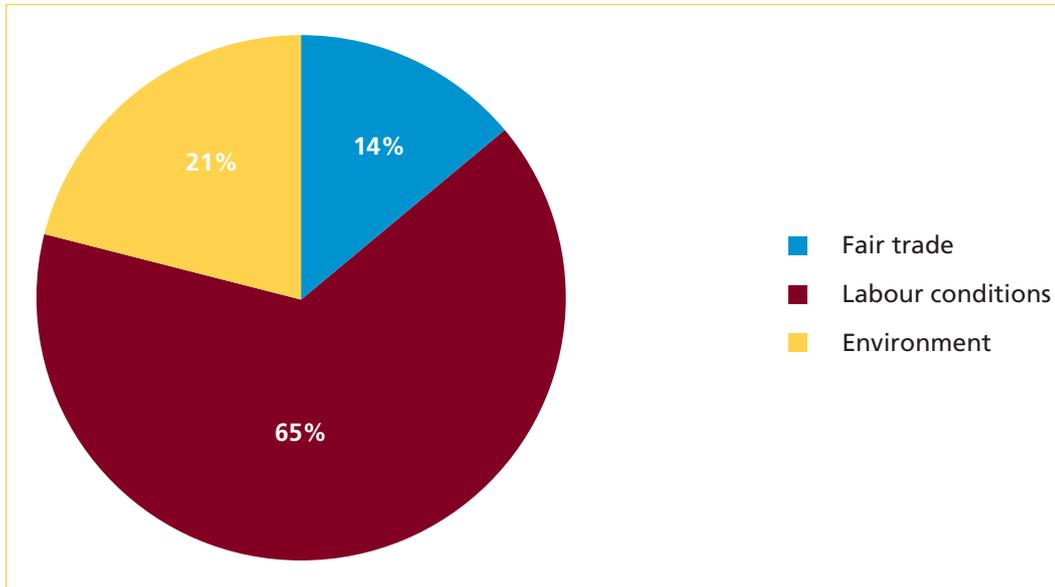
Ideally this is clothing that maximises positive and minimises negative environmental, social and economic impacts along its supply and value chain. Clothing that is sustainable does not adversely impact people or the planet in its production, manufacture, transport, retail or end of life management. In practice, achieving this is not straight forward, involves trade offs between different impacts and prioritised improvements over the short, medium and long term. Defining and communicating "sustainable" clothing in terms that all stakeholders, in particular consumers, respond to is a key action in the plan.

A range of practical examples of sustainable clothing are on the market. These vary in the level of sustainability improvement they achieve focusing on environment, fair trade and/or labour issues to varying extents. Some generic examples of actions to improve sustainability of clothing are: clothing made from certified organic cotton, using non toxic dyes; detergents that enable us to use less energy when washing our clothes and are less polluting; washer and dryers using less energy; clothing reused at end of life on the second hand market; polyester clothing recovered at end of life to be remanufactured into more clothing; Fair Trade certified clothes enabling more equitable trading conditions, ensuring labour standards are adhered to in practice and preventing exploitation e.g. child labour along the supply chain.

² Defra, 2007, Mapping of Evidence on Sustainable Development Impacts that occur in the Life Cycles of Clothing, Environmental Resources Management (ERM)

Introduction

Current Sustainability Interventions, (Source: Defra, 2007)



1.4. How does the Roadmap Work?

It has three iterative steps:

Evidence	Gathering the facts to facilitate a comprehensive understanding of the environmental, social and economic impacts of clothing across all lifecycle stages (raw materials to end of life) and where actions will be most effective.
Stakeholder Engagement	Engaging and building ownership of stakeholders along the clothing supply chain to discuss and agree actions.
Action	Implementing practical actions to improve the environmental and social performance of clothing and disseminating this good practice wider to encourage uptake in the market.

In conjunction with nearly 300 clothing stakeholders Defra has gathered evidence and provided a platform for extensive discussions on the key environmental and social impacts of clothing and where actions will be most effective taking existing initiatives into account. Publications documenting these evidence and stakeholder engagement aspects of the roadmap completed to date are available on the Defra Clothing Roadmap website.

This is the **Action Plan** setting out agreed stakeholder actions – the third step in the roadmap.

1.5 Target Audience

This Action Plan is for stakeholders in the clothing roadmap and other parties interested in sustainable clothing.

1.6 Scope

The clothing roadmap scope is garments consumed by UK consumers, commercial and public sectors. This includes textiles used in the manufacture of clothing, but, in the main, excludes shoes, accessories, soft furnishings, carpets and commercial textiles.

1.7 Timescale

The roadmap commenced in Sept 2007. The first Action Plan was published in Feb 2009 with subsequent updates in Sept 2009 and Feb 2010. Dates for implementation of specific actions in the plan are in Annex 1.

2. Background

2.1 Roadmaps for High Impact Products and Services

The Sustainable Clothing Roadmap is one of ten being trialled on products with high sustainability impacts, under Defra's programme on Sustainable Consumption and Production (SCP). More information on SCP and the roadmaps is at

<http://www.defra.gov.uk/environment/business/scp/index.htm>

2.2 Clothing Roadmap Activities to Date

The roadmap was launched in Sept 2007. In this time the following roadmap milestones have been implemented (and are published on the Defra Clothing Roadmap website).

2.2.1 **EVIDENCE** on Sustainability Impacts of Clothing and where further actions can be most effective

- Baseline: Mapping the Sustainability Impacts and Interventions across the Lifecycle of Clothing (Dec 2007).
- Briefing Note: sustainability impacts and interventions of clothing summarises the key impacts and current improvement interventions (Dec 2007).
- Briefing Note: Proposed action areas and roadmap process summarises key action areas and the process for running the clothing roadmap (Jan 2008).
- Public Understanding of Sustainable Clothing.
- Reducing the Environmental Impacts of Clothes Cleaning.
- Maximising Reuse and Recycling of UK Clothing and Textiles.

2.2.2 **ENGAGING STAKEHOLDERS** along the clothing supply chain

The following multi-stakeholder and 1-to-1 meetings have been conducted to date to agree the impacts and action

- 5 Sept 2007 – 1st Sustainable Clothing Roadmap conference, Chatham House London
- 31 March 2008 – 2nd Sustainable Clothing Roadmap conference, Church House London
- 20 Feb 2009 – 3rd Sustainable Clothing Roadmap conference, London Fashion Week & Royal Geographic Society
- 23 Feb 2010 – 4th Sustainable Clothing Roadmap conference, Southbank Centre & London Fashion Week
- 2008-2009 – Evidence project workshops x 8
- Presentations at key industry events by Defra Ministers and the roadmap team (2007-to date)
- 1-to-1 meetings with over 100 organisations to date, and continuing as new stakeholders join the roadmap (2007-to date).

As a result nearly 300 organisations are now engaged in the roadmap. While the focus has started with UK based organisations, due to the fact that 90% of UK consumed clothing is imported, it is strongly recognised that many of the most significant impacts occur overseas. Hence wider international linkages through stakeholder organisations are taking place through their proposed actions as well as demonstration projects with India and potentially China, due to their high clothing imports into the UK.

3. Roadmap Actions

3.1 Action Areas

From the analysis of the existing evidence and consultation with stakeholders, the following action areas³ for the roadmap to focus on were agreed.

1. Improving Environmental Performance across the Supply Chain
 - Sustainable Design
 - Fibres and Fabrics
 - Maximising Reuse, Recycling and end of life management
 - Clothes Cleaning
2. Consumption trends and behaviour
3. Awareness, media, education and networks
4. Creating market drivers for sustainable clothing
5. Instruments for improving traceability along the supply chain (ethics, trade and environment).

By taking action in these areas both business and consumer facing stakeholders can improve the sustainability of clothing. For consumers this means changing behaviour to mitigate impacts of clothes buying, maintenance and disposal. For business, this means:

- Developing and offering ranges of clothing which have improved social and environmental sustainability qualities;
- Informing and helping consumers in areas where they can make a difference e.g.
 - Clothes maintenance in the least energy and chemical intensive way
 - Reuse and recycling of unwanted clothing
- Further improve environmental, labour, trade and animal welfare practices and traceability across the clothing supply chain;
- Working with government and other stakeholders to identify and implement best practices.

The five main action areas were discussed in breakout sessions at the multi-stakeholder meeting on 31 March 2008 as well as a range of follow up meetings with organisations. Defra agreed to take actions within its remit of environmental protection and asked other stakeholders (industry, support, government etc.) to take action within theirs. Actions can be individual or sector wide. The actions stakeholders have agreed are outlined in **Table 1 in Annex 1**. It should be noted that not all actions have been taken up by stakeholders. In the review of the action plan, these remaining actions should be revisited, as well as new action areas identified in line with new evidence, stakeholders and technology.

3.2 Roles

3.2.1 Role of Defra

- Defra's role has been to co-ordinate the roadmap, gather the initial evidence and provide a platform for stakeholder engagement and actions to be agreed.
- Defra is looking to clothing and fashion stakeholders to participate, take ownership of actions in their respective areas and the roadmap into the future.

³ Details on the specific actions identified are in the Briefing Note: Proposed action areas and roadmap process

Roadmap Actions

Defra's actions are within its remit of environmental protection and activities include:

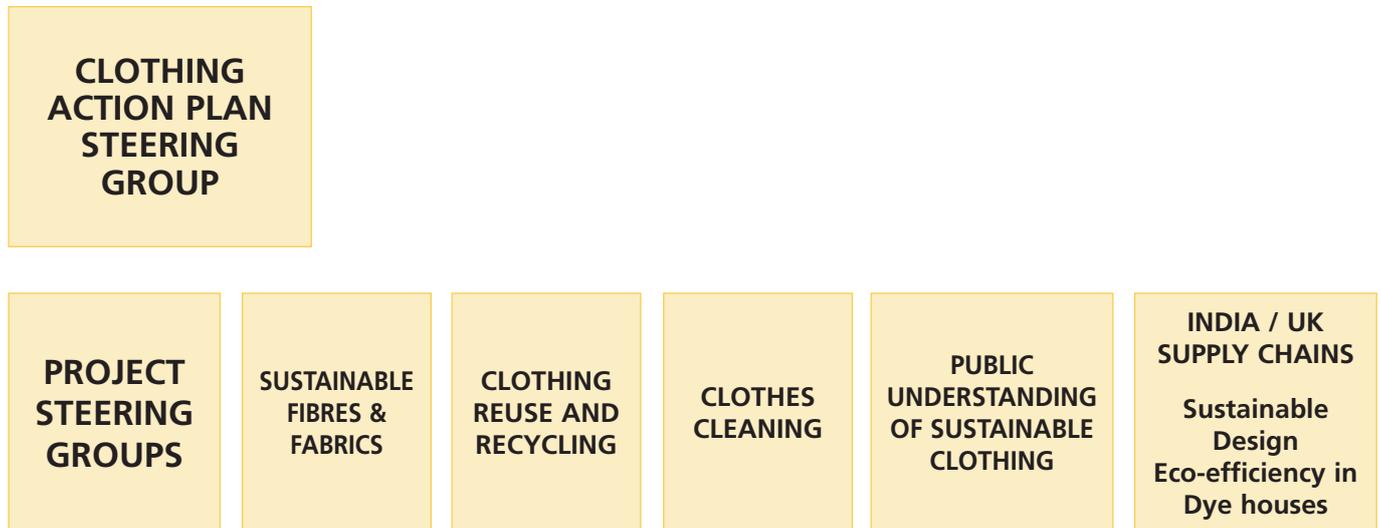
1. Co-ordinating the roadmap with a view to industry organisations taking a greater role in these functions over time.
2. Evidence generation – Funding four projects in the following areas where greater clarity is needed to ensure sound facts are used to determine the most effective course of action by both policy makers and other stakeholders:
 - Public understanding of sustainable clothing – unlocking consumer behaviour for sustainability benefit;
 - The role and business case for sustainable fibres and fabrics going forward;
 - Reducing the energy and chemicals intensity of clothes cleaning;
 - Maximising end of life clothing reuse and recycling.
3. Green Public Procurement (GPP) – In line with the roll out of EU GPP for textiles, supporting a demonstration project on the business case for sustainable clothing procurement in the public sector.
4. Developing UK and influencing international SCP Policy – Co-ordinating the following two demonstration projects funded under the Sustainable Development Dialogue and aimed at improving sustainability in the clothing supply chain along UK/India supply chains:
 - Sustainable Design partnerships (India and UK);
 - Eco-efficiency in Indian Dye houses supplying UK market.
5. Influencing consumers through the Direct Gov Environment website – developing clothing web pages to advise consumers on how they can reduce the environmental footprint of their clothing consumption.

3.2.2 Role of Stakeholders

Stakeholders participate in the Roadmap at two levels:

- For those wishes to be part of the action, the following are in place:
 - Clothing Action Plan Steering Group – small action orientated group for those taking actions in the areas specified
 - Project Steering Groups for evidence and demonstration projects to ensure they reflect the practical realities and knowledge. Approx 200 stakeholders are participating this way.
- By giving their views and having a watching brief.

3.3 Steering and Expert Groups



Steering Group members identified their areas of interest to Defra and on this basis were invited onto relevant groups. Clothing Action Plan Steering Group members are listed in Annex 2. Project Steering Group members are listed in the *Summary of Defra Projects* on the clothing roadmap website. Involvement is voluntary and scheduled to utilise stakeholders time most effectively.

3.3.1 Clothing Action Plan Steering Group Remit

This is a small action orientated group made up of those organisations taking actions in the proposed action areas as in Table 1, Annex 1. The aim of this work group is to implement these actions and disseminate the lessons learnt/ best practice to wider stakeholders in the clothing sector. In this way, the roadmap will play an important role in catalysing similar activities amongst wider stakeholders. The remit includes:

- Meeting four times/year as follows to discuss progress on actions and ways to disseminate these wider to the clothing sector;
- Document a case example on completion of the action for publication on the Roadmap website;
- Review the roadmap action plan to update and add new actions as needed.

3.3.2 Project Steering Group remit includes:

- Commenting on project specifications, to ensure the right issues are covered;
- Providing data input so real, live industry data is used;
- Commenting on draft project reports and attending dissemination meetings to discuss findings and next steps.

4. Review and Monitoring Progress

To ensure that the actions in the Roadmap take place and are dynamic it will be kept under review by the Clothing Action Plan Steering Group. New actions can be added six monthly from existing or new stakeholders if needed. The Plan will be reviewed annually.

5. Further Information

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Table 1 – Actions

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain			
Sustainable Design	Launch and continued development of the EarthPositive® product line to address environmental, social and climate issues in a holistic approach (organic, ethical, ecological, low-water, low-carbon).	Continental Clothing	Jan 2008 – 2009 (complete)
	Pilot partner with Carbon Trust's carbon labelling initiative; carbon footprinting of own clothing line to include raw materials, production, transportation and distribution in the UK. Further work on developing footprinting models for textile screen-printing, consumer usage and disposal.	Continental Clothing	Jan 2008 (complete)
	Demonstration project UK/India Sustainable Clothing Design (funded by Defra under the International Sustainable Development Fund). Project Contractor: Centre for Sustainable Fashion.	Defra	Jan 2009 – March 2010
	Demonstration project UK/India Sustainable Clothing Design – project findings and ongoing activities to be piloted through online active resource and materials library for industry to link designers and buyers in the UK with identified sources for sustainable materials in India. This development of the original project has benefited from additional funding streams to build upon the original project outputs.	Centre for Sustainable Fashion	2010
Sustainable design (supports)	Energy workshops: Organising and managing energy workshops for suppliers where information, tools, best practice examples as well as financing options are presented.	Adidas	2008 – 2010
	Environmental indicators: Developing and implementing environmental metrics and performance measures for supplier focus groups. The performance measures will form the basis for target-setting by suppliers.	Adidas	2009 – 2011
	Development of textiles environmental metrics tools for business. Metrics expert sector group to be set up by RITE to look at all parts of clothing supply chain.	The RITE Group	2009 – 2010
	Collate and disseminate best practice examples amongst UK clothing reuse and recycling organisations.	Textile Recycling Association Local Authority Recycling Advisory Committee Salvation Army Trading Co Ltd.	2009
	Supporting the development of 'green' factories with our suppliers. <ul style="list-style-type: none"> First two 'green' supplier factories opened in April 2008 in Sri Lanka independently assessed and accredited by Leadership in Energy and Environmental Design (LEED). Further three (one in Wales, one in China and one in Sri Lanka) are under development. 	Marks & Spencer's	2008 – 2012

Annex 1

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
Sustainable design (supports) (Cont...)	Use of a consistent apparel index in designing and developing Nike products that reflect the impact of apparel on the environment by, measuring the amount of waste created during the design and manufacturing phase, using environmentally preferred materials and by eliminating the use of toxins.	Nike	2010
	Development and dissemination of Green Factory Guideline for suppliers. Review and improve green factory guidelines and develop monitoring systems to measure impact of green factory initiatives.	Tesco	2008 – 2009 2009 onwards
Fibres and Fabrics	Sustainable materials: Further improve the method for understanding environmental impact and assessing materials for their sustainable content.	Adidas	2009 – 2010
	Evidence Project: The role and business case for existing and emerging fibres in sustainable clothing. Project Contractor: Central Science Laboratories, Leeds University and DeMontford University.	Defra	Nov 2008 – March 2010
	Eco-Efficiency of Indian Dye houses supplying UK Supply Chains (funded by Defra under the International Sustainable Development Fund). Project Contractor: Colour Connections Ltd.	Defra	Feb 2009 – March 2010
	Develop a cotton benchmark evaluating the different sustainable cotton options.	MADE-BY	2010-2011
	Sustainable Textiles – Reducing the environmental impact of the textiles sold by trialing new fibres such as bamboo, renewable plastics and new ways of producing fibres such as organic cotton, linen and wool.	Marks & Spencer's	2007 – 2012
	Cotton – Launching a sustainability strategy covering all our cotton including initiatives such as Fairtrade, organic and the international cotton industry 'Better Cotton Initiative'. A draft M&S Global Cotton Sourcing strategy has been developed and is being circulated within M&S and to some of our cotton expert stakeholders for comment.	Marks & Spencer's	2007 – 2012
	Use of a Material Analysis Tool (MAT) based on lifecycle thinking to quantitatively evaluate and rank material choices in designing and developing Nike products. Each material is assigned a numeric value that feeds into a sustainability score for product. The MAT provides visibility to areas for improvement and is set in a framework of 19 environmental impact questions in four weighted categories such as chemistry, energy intensity, physical waste and water intensity.	Nike	2010
	Researching technologies such that in the future, Tu garments are made using sustainable raw materials e.g. from plant and tree sources as well as recycled materials.	Sainsbury's	Ongoing
	Organise and develop a series of seminars in India to disseminate the business case for eco-efficiency in dyehouses. This follows on from the Defra commissioned Eco-efficiency in Indian Dyehouses project.	Society of Dyes and Colourists (SDC) and Colour Connections	Feb to April 2010

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
Fibres and Fabrics (Cont...)	Develop sustainable raw material sourcing strategy setting out assessment criteria for sustainable claims as well as producer and customer benefits.	Tesco	2009 onwards
	Continue to offer customers a range of products from sustainable fibres such as organic cotton, recycled polyester and recycled cotton. E.g. organic cotton schoolwear 2008 and recycled polyester women's formal trousers. Continue to assess new fibre types and extending these across a range of products.	Tesco	Ongoing
	Develop Global Organic Textile Standard (GOTS) compliant ink systems for textile printing.	T Shirt and Sons	2007 – 2010
Maximising Reuse, Recycling and end of life management	Project to develop rapid disassembly techniques to enable reuse of corporate clothing and up-cycling of garment waste. Funded by the Technology Strategy Board and involving an industry consortium.	Aestiva Limited and Leeds Centre for Technical Textiles with C-Tech Innovation Ltd; Madeira UK Ltd; Royal Mail Group plc; Mathias & Sons; Gnosys UK Ltd; Oxfam Waste Saver	2009 – 2011
	Promotion of donating unwanted clothing and textiles for reuse to charity shops via media releases and other promotional activity to influence consumer behaviour.	Association of Charity Shops	Ongoing
	Participation in and promotion of a national reuse event with other community sector organisations to increase public awareness and popularity of reuse of clothing and textiles (and other products).	Association of Charity Shops	Beginning late 2009/early 2010 and then annually
	Packaging – increase uptake of the On-Pack Recycling Label (OPRL), giving information to customers on the recyclability of the packaging materials in the UK, by both fashion labels and retailers to cover 25 clothing brands/labels.	British Retail Consortium/OPRL Ltd	2012
	Develop further fundraising partnerships between collection agents and charities; promote reuse and recycling of clothing as a risk free venture to raise funds for charity.	Clothes Aid	Ongoing
	Work closely with regulatory bodies to develop the optimum business model for reuse fundraising in relation to such matters as licensing, compliance and especially improved transparency (safeguarding the public).	Clothes Aid	2009-2010
	Continue testing and development of innovative pilot schemes to improve collection responses from households, one-stop locations and corporate outlets.	Clothes Aid	Ongoing
	Pioneer and implement additional initiatives to minimise any associated environmental impacts that occur as a result of door-to-door clothing collections.	Clothes Aid	2010 onwards
	Evidence Project: Maximising Reuse and Recycling of UK clothing and textiles. Project Contractor: Oakdene Hollins.	Defra	Oct 2008 – May 2009 (complete)

Annex 1

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
Maximising Reuse, Recycling and end of life management (Cont...)	As part of the Defra project above with Oakdene Hollins, to review the relevance of a Quality Protocol (QP) and if appropriate work with relevant stakeholders to submit to the QP selection process.	WRAP	Jan to March 09
	Review the outcome of the Defra project work and consider whether there is a specific role that WRAP should play in the promotion of policy to encourage reuse or develop markets and submit a proposal to Defra for funding. This would then be reflected in WRAP's business plan.	WRAP	Post March 09
	Centre for Remanufacturing and Reuse (CRR) 'Uniform Reuse' Project Defra (BREW) funded project to improve reuse and recycling options for corporatewear (work wear, protective wear, career wear, casual wear and uniforms) through conducting practical research including the development of an online resource to educate the industry and raise awareness of the opportunities available. The website www.uniformreuse.co.uk was launched at the Corporate Clothing and Workwear Show held at the Birmingham NEC, April 2009.	Centre for Reuse and Remanufacture	2008 – 2009 (complete)
	Development of a UK based upcycling and downcycling factory; the first of its kind, that will take in pre and post consumer textile waste from across the UK and Europe and divert it into new products for both the consumer and corporate markets.	From Somewhere and Worn Again	2009 onwards
	Running trials of new technologies to enable greater volumes of end of life clothing to be recycled into value add products for the automotive, permaculture and industrial sectors.	Leeds Centre for Technical Textiles	Ongoing – 2010
	Increase hanger recycling to 100 million.	George	2011
	Decrease transit packaging through improved distribution methods by 40% from 2007 to 2010.	George	2010
	Ensure all George departments are zero waste by end of 2010 through working with New Life charity and Asda store recycling guidelines.	George	2010
	Ensure all products used or sold in George that originate from timber are FSC or PEFC Certified.	George	2011
	Using recycled plastic (e.g. used bottles) to make polyester in ranges of men's, women's and children's polyester fleeces. Extend to other polyester ranges such as trousers, suits and furniture 'fill' by 2012.	Marks & Spencer's	2007 – 2012
	The Oxfam Clothes Exchange encourages our customers to return unwanted M&S outerwear garments to Oxfam stores in return for a discount voucher valid for a month giving £5/ 7 off for use on any clothing and home purchase of £35/ 50 or more in UK and Republic of Ireland stores. Revenues generated from the sale of donated garments provides funding for Oxfam's work to help people to escape poverty around the world.	Marks & Spencer's	Jan 2008 – 2012 (complete)

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
Maximising Reuse, Recycling and end of life management (Cont...)	Clothing hangers – Extending hanger recycling with a customer awareness campaign to build on the 50 million we currently recycle and reuse each year.	Marks & Spencer's	2007 – 2012 (complete)
	Packaging (sustainable raw materials) – Increasing the amount of packaging made from more sustainable raw materials such as recycled materials and Forest Stewardship Council wood pulp.	Marks & Spencer's	2007 – 2012
	Packaging (recycling and composting) – Ensuring that all packaging can be easily recycled or composted accepting that in some case this may require the use of heavier materials.	Marks & Spencer's	2007 – 2012 (complete)
	Packaging (WRAP logos) – Labelling all our packaging with the WRAP and Recycle Now symbols – incorporated onto 80% of our clothing and home packaging.	Marks & Spencer's	2007 – 2012
	Work to develop a viable garment take back process.	Nike	2015
	Develop a technology to identify garment polyester at the post consumer stage to facilitate sorting and separation *(action removed as now incorporated in 1st Nike action on this page).	Nike	2010 (action removed)*
	Develop a technology to recycle single polymer worn out apparel that cannot be reused to new textiles *(action removed as now incorporated in 1st Nike action on this page).	Nike	2010 (action removed)*
	Develop a technology to recycle single polymer worn out apparel to feed into other businesses *(action removed as now incorporated in 1st Nike action on this page).	Nike	2010 (action removed)*
	Develop a business case within the industry to design and develop more single fibres/polymer apparel *(action removed as now incorporated in 1st Nike action on this page).	Nike	2010 (action removed)*
	Increase collection infrastructure, capacity and involvement of major charities and retailers to enable greater quantities of unwanted clothing to be recovered for reuse and recycling.	Oxfam	Q1 2009 onwards
	Formulate new financially bonded national, regional and local clothing/textile collection agreements with local authorities, charities, waste management businesses etc. New collection agreements to include door to door, clothing bank and charity shop collections. Implement new bonded clothing take back schemes with national, regional and local retailers.	Recyclatex	Ongoing
	Take back and recycling of school uniforms, at end of life in 320 stores within store consumer information – Clothes recovered by Salvation Army Trading for reuse and Oxfam for reuse and recycling.	Sainsbury's	from June 2008 onwards (complete)

Annex 1

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
Maximising Reuse, Recycling and end of life management (Cont...)	Researching technologies and new, higher value markets for end of life clothing recycle.	Sainsbury's	2008 – 2009 (complete)
	Reduce product packaging for clothing by 33%.	Sainsbury's	2013
	Increased use of care labels made from recycled polyester, in lingerie.	Sainsbury's	2010 – 2011
	Developing in store collection with several large clothing retailers.	Salvation Army Trading Co Ltd	ongoing – Q2 2009
	Signed agreement in main London Shop to work with several ethical boutiques to create bespoke womenswear garments from recycled fabrics.	Salvation Army Trading Co Ltd	Ongoing
	Reduce impact of clothing production by extending the range of products available made from recycled fibres e.g. polyester, cotton.	Tesco	Ongoing
	On site and in store facilities for take back and recycling of textiles and footwear including school uniforms during Back to School promotions.	Tesco	Ongoing
	Clothing hangers – Introduction of completely reusable and recyclable hanger with in store collection of Tesco and non Tesco hangers. Hangers will be sorted for re-use or recycling.	Tesco	2008 onwards
	Packaging – (Reduction) Reduce product packaging by 25% across all Tesco clothing items. (Recycling) Advise customers how to recycle all packaging by 2010. Increase use of recyclable packaging materials with aim of totally recyclable packaging by 2010.	Tesco	2010
	Packaging – Increase the amount of packaging made from sustainable raw materials with an aim to have all paper and board from 100% FSC or similar sustainably managed sources by 2012.	Tesco	2012
Implementation of school and community group clothing collection schemes. Such schemes could include special clothing banks, special collection days which could raise funds for local causes.	Textile Recycling Association (individual members)	Ongoing	
Clothes Cleaning	Evidence Project: Reducing the Environmental impact of clothes cleaning. Project Contractors: Bio Intelligence Services, Intertek, Giraffe.	Defra	Oct 2008 – May 2009 (complete)
	Inform the following policy instruments with key evidence from the “Reducing the Environmental Impacts of Clothes Cleaning” project to maximise their potential to effect environmental improvements: <ul style="list-style-type: none"> • Ecodesign of Energy Using Products Implementing Measures (IM)/Energy Labeling Revision for washing machines (IM revision), tumble driers and combinations respectively. • EU Ecolabel criteria on textiles (revision), laundry detergents and washing machines respectively. 	Defra	2009 -2012

Action Area	Action	Organisation	Timescale
1. Improving Environmental Performance across the Supply Chain (Cont...)			
	All George garments to be labelled with 30 degree wash label and recommended line drying	George	2010
	The Climate Group campaign – Working with the Climate Group on a major educational campaign encouraging people to wash clothes at 30C degrees to cut energy use and CO2 emissions. Around 70% of our clothing is labelled with the 'Think Climate Recommend Wash at 30°C' message and supported with in-store information. In early 2008 the 'wash at 30°C' message was added to the front of all our washing detergent packaging.	Marks & Spencer's	2007 – 2009 (complete)
	'Save Energy wash at 30°C' on all care labels except Childrenswear and intimate apparel.	Sainsbury's	Ongoing
	Product labelling – Think of the environment – Wash at 30 message included on 75%+ washable clothing products.	Tesco	Ongoing
	'Wash at 30 degrees' logo launched across own brand laundry detergent in all format; powder, liquid, tablets.	Tesco	2009
	Trial on pack communication of the carbon footprint of own label detergents. All Non-biological detergent formats labelled with carbon footprint information during 2008. Remaining detergents to be carbon footprint labelled in 2009.	Tesco	2008 – 2009
	Implement a program of detergent concentration. Reduce required dosage of liquid formats to 50% of the original dosage to clean the same amount of clothing. Reduce the chemical loading on the environment and packaging per wash (48% reduction achieved to date). Reduce the amount of transport required per wash to deliver the product to store by (50% reduction achieved to date).	Tesco	Ongoing
2. Consumption Trends and Behaviour			
	Launch consumer Carbon Reduction Label (using PAS2050 Carbon Footprint measurement) to inform consumers about the Carbon footprint of the product and their own contribution to the impact on climate – through washing, drying, retailer choice and disposal – in the lifecycle of a garment.	Continental Clothing and Ascension	Feb 2009 (complete)
	Evidence Project: Public Understanding of Sustainable Clothing. Project Contractor: Centre for Sustainable Consumption at Sheffield Hallam University and University of Surrey.	Defra	Feb 2008 – Nov 2008 (complete)
	Defining and Communicating Sustainable Clothing to consumers – Based on existing evidence as well as the results of the "Public Understanding of Sustainable Clothing" study update and translate the 5 Defra behaviour goals for consumers and clothing for use by both policy and business.	Defra	2009 (complete)
	Increasing UK Consumer awareness on clothing impacts and what they can do to reduce these on The Direct Gov <i>Greener Living</i> and <i>Act on CO₂</i> clothing web pages.	Defra	2009 (complete)
	Create Facebook on Act on CO ₂ clothing web page (action removed as action above via Direct Gov is now the agreed government consumer website)	Defra	2009

Annex 1

Action Area	Action	Organisation	Timescale
2. Consumption Trends and Behaviour (Cont...)			
	Increasing the number of Oxfam boutiques (currently 3) selling a range of types of sustainable clothing (reused, remade, Fair Trade etc.) aimed at changing consumer perceptions and buying trends.	Oxfam	from Spring 2009 onwards
3. Awareness, Media, Education and Networks			
Education and Capacity Building – (3rd level fashion)	MA Fashion and the Environment – providing the opportunity for new knowledge development and to use design to develop positive change in the ecological, social and cultural impacts relating to fashion.	London College of Fashion through Centre for Sustainable Fashion	2008 onwards
	Integrating the principles of design for sustainability into teaching and learning practice'. Action based research leading to the development of teaching and learning tools to educate for sustainability across curriculum in fashion based courses at undergraduate level. Funded under the Higher Education Academy (HEA).	Centre for Sustainable Fashion at London College for Fashion	2010
	Integrate Fashion Futures into graduate training courses. Inspired by the Fashion Futures scenarios, students propose and 'visualise' fashion products and service solutions that would thrive sustainably (economically, socially and environmentally) in 2025. Initial pilot with students from the London College of Fashion's MA Fashion and the Environment completed – ongoing pilots in pipeline with a view to developing generic module.	Forum for the Future, Levi Strauss & Co	2009 onwards
	Develop and deliver training materials on sustainable clothing sourcing, standards and definitions for head office and store staff.	Tesco	2008 onwards
Education (Schools)	Salvation Army Trading Schools Clothing Collection – commenced with 6 Local Authorities and to be rolled out nationally.	Salvation Army Trading Co Ltd	2009 – 2010
	Develop a project based activity in relation to sustainability and environmental concerns of clothing and deliver through the SDC Colour Experience to secondary schools.	Society of Dyes and Colourists (SDC)	May 2010
Networks and Information Provision (business)	Grow networks, hold events exhibitions and promote sustainable clothing topics.	British Fashion Council; Centre for Sustainable Fashion; Ecotextile News; Estethica; Ethical Fashion Forum European Outdoor Group, Sustainability Working Group; Fairtrade Foundation UK; Green Fibres; RITE Group; Society of Dyes and Colourists Soil Association;	Ongoing

Action Area	Action	Organisation	Timescale
3. Awareness, Media, Education and Networks (Cont...)			
Networks and Information Provision (business) (Cont...)		The Textile Institute Sustainable Ethical and Environmental Special Interest Group; Textile Recycling Association; UK Fashion and Textiles	Ongoing
	Undertake collaborative media work to encourage further extension of the lifetime of clothing through reuse based on the waste, resource and GHG savings that this provides.	Clothes Aid	Summer 2010
	Develop and deliver a programme of online resources, workshops and 1-1 intervention to inform and grow fashion businesses' capability to respond to the ethical, environmental and cultural demands placed on them and to find new opportunities for sustainable practice. Funded under the European Regional Development Fund.	Centre for Sustainable Fashion	2009 onwards
	Launch 'Fashion Futures' report – four plausible, stretching scenarios for what the global apparel industry could look like in 2025. Run workshops to use the scenarios with industry to test strategies and develop innovative responses to sustainability challenges. Publicise scenarios to help to challenge the status quo of unsustainable fashion consumption.	Forum for the Future, Levi Strauss & Co	Complete – Feb 2010 Awareness building Feb 2010 onwards
	Produce an online resource for 'Good Practice' in textile printing and decoration. This will cover the whole production cycle from harvest to high street.	T Shirt and Sons	2009
	Initiate annual stakeholder meetings in Africa to raise the awareness for specific social, environmental and economic problems in the agricultural sector and to promote the idea of social business.	Cotton Made in Africa (CmiA)	Nov 2009 onwards
International business networks	Explore possibilities for best practice demonstration projects that can be run with UK / China clothing supply chain companies under the UK:China Sustainable Development Dialogue.	Sustainable Fashion Business Consortium, Hong Kong	2008 onwards
	Explore possibilities for further links with the WWF Hong Kong Low Carbon Manufacturing Programme textile sector initiatives.	WWF	2009 – 2010
	Extend the linkages of the Sustainable Clothing Roadmap with UNEP through the Ecolabel project being carried out in India and other countries.	UNEP and Defra	2008 – 2011
Capacity Building (business)	Offer accredited sustainable fashion training courses and knowledge supports for business.	CSF	Nov 2008 onwards
	Provide a range of chartered courses at various levels on best practice in the wet processing of textiles, colour management, fastness testing and the environmental case for this. These courses are run in the UK, India, Hong Kong, China, Pakistan, Bangladesh.	Society of Dyes and Colourists	Ongoing

Annex 1

Action Area	Action	Organisation	Timescale
4. Creating Market Drivers for Sustainable Clothing			
Awards	Fashioning the Future: International Student Awards for Sustainability in Fashion to share and build on best practice in education for sustainability across national and international higher education fashion networks whilst profiling emerging talent across the disciplines of fashion.	Centre for Sustainable Fashion	2010-2011
	SDC international textile design competition, themed on Social Responsibility, to be awarded at the Textile UK conference.	Society of Dyes and Colourists	October 2010
League Table	Conduct research, building on the success of the UK National Consumer Council's "Greening Supermarkets", to produce a league table of responsible clothing retailers incorporating social, energy/environmental issues across the clothing supply chain.	Consumer Focus	Autumn/Winter 2009 – 2010 (action removed)
Public Procurement	Sustainable Procurement public sector clothing demonstration project.	Defra	2009 – 2010
	Development of a procurement toolkit incorporating ETI labour and trade criteria for use by public sector procurement.	Ethical Trading Initiative (ETI)	2008 – 2009 (complete)
	Evaluating the economic and market access barriers to attracting and increasing imports of environmentally preferred and sustainably designed product.	Nike	2012
5. Improving traceability along the supply chain (Ethics, Trade and Environment)			
Ethics and Development	The CmiA initiative will integrate another two African countries (Malawi and Ivory Coast) into the Cotton made in Africa approach and verification system. At the moment the CmiA project cotton is produced in four African countries: Benin, Burkina Faso, Zambia and Mozambique.	Cotton Made in Africa (CmiA)	2010 -2011
	Develop a new ethical garment sector initiative – Responsible and Accountable Garment Sector (RAGS) – a £3.5 million Challenge Fund to support a range of efforts to drive better development impacts in clothing production and trade.	DFID	2009 (complete)
	Define and develop a community and factory investment programme in Bangladesh that benefits factory workers and communities involved in making our product.	George	Ongoing
Supply chain tools	Establish and maintain a fair and reliable third party verification system to assure the implementation of the Cotton made in Africa–Sustainability Standard. This standard supports and enforces social, ecological and economic factors.	Cotton Made in Africa	End 2010
	Further develop our ethical audit process to cover more elements of the supply chain, starting with fabric mills.	George	2012
	Traceability programme to be implemented in Bangladesh for 100% cotton garments.	Sainsburys	Ongoing
	Use new purchasing tools through traceable supply routes to determine preferred farming groups for Fairtrade and reduce the on-costs through the supply chain to enable more fair-trade products to be produced.	Sainsburys	Ongoing

Action Area	Action	Organisation	Timescale
5. Improving traceability along the supply chain (Ethics, Trade and Environment) (Cont...)			
Supply chain tools (Cont...)	Transparency of cotton supply chains from field to garment. Phased roll out of traceability system to countries of garment manufacture (e.g. Bangladesh, Turkey, China). This will help prove compliance to commitment to ban Uzbek cotton due to environmental and forced child labour associations.	Tesco	Ongoing
Critical path time pressure	Dissemination of ETI Studies on Critical Path Time and Cost Pressures to clarify the facts.	ETI	Ongoing
Increase fair trade uptake	Campaign aimed at transforming trade by increasing Fairtrade's impact on producers' lives and shifting public opinion and consumer lifestyles to make fair trade the norm.	Fairtrade Foundation UK	2008 – 2012
	Launching a sustainability strategy covering all our cotton including initiatives such as Fairtrade.	Marks & Spencer's	2007 – 2012
	Introduction of new Fairtrade lines beyond existing cotton.	Sainsbury's	Est Oct 2009
	Making Fairtrade cotton available to the mass market by introducing Fairtrade products in menswear, ladieswear and kidswear.	Tesco	Ongoing
Animal Welfare	Clothing standards – improve traceability in merino wool supply chains by working with Australian Wool Innovation, Australian Wool Exchange and Australian commercial entities to ensure products made exclusively from wool from non-mulesed flocks are available to consumers.	British Retail Consortium	2012
	Animal welfare standards – improve awareness of UK consumer concerns among merino wool producers so that non-surgical alternatives to mulesing are widely adopted in the medium term (milestones: retailers able to source individual lines by 2010, at least 25% of procurement by 2012, rising to at least 50% by 2015) and effective breeding solutions put in place (widespread adoption by 2020).	British Retail Consortium	2012
	Clothing standards – Improving traceability in non-food supply chains for animal derived raw materials and work with animal welfare groups to develop sourcing policies on animal welfare for leather and wool. Operate a Fur-free policy and ban on skins such as snake and crocodile.	Marks & Spencer's	2007 – 2012
	Clothing standards – Work with animal welfare groups to develop sourcing policies on animal welfare for leather, wool, cashmere and silk and establish appropriate monitoring systems to manage enforcement of these. Continue to operate UK Fur-free policy and ban on exotic skins.	Tesco	End 2009 with implementation on a phased roll out from that date
	Encourage companies to commit to animal welfare related improvements in their fashion, furniture and clothing ranges through its Good Business Awards.	RSPCA	2010/11
	Improving standards in leather across the industry through dissemination and translations of the RSPCA leather best practice guide – 'Guide to improving animal welfare in the leather industry'.	RSPCA	2010/11

Annex 2

Clothing Action Plan Steering Group

ORGANISATION	
Adidas	Karin Ekberg / Philipp Meister
Aestiva Limited	Garth Ward
Association of Charity Shops	David Moir
British Fashion Council	Caroline Rush / Harold Tillman
British Retail Consortium Environmental Group	Rowland Hill / Jane Milne
Centre for Sustainable Fashion (CSF)	Dilys Williams
Centre for Remanufacturing and Reuse (CRR)	Nick Morley
Clothes Aid	Michael Lomotey
Consumer Focus	Lucy Yates
Continental Clothing	Mariusz Stochaj
Cotton made in Africa/Aid by Trade Foundation	Stephan Engel
Defra	Defra (Roadmap) Dorothy Maxwell (GVSS) / Ed Currie / Sean Smith
	Defra (Eco-Design of Energy-using Products) Steven Mills
	Defra (Waste) Louise Leighton
DFID	Deborah McGurk
Ethical Fashion Forum	Tamsin le Jeune
European Outdoor Group	Vanessa Knowles / Kilian Hochrein
Fairtrade Foundation UK	Vanessa Brain
Forum for the Future	Vicky Murray
From Somewhere and Worn Again/Estethica	Orsola de Castro / Fillippo Ricci
GEORGE @ Asda	Sadie Robson / Paul Wright
Local Authority Recycling Advisory Committee (LARAC)	Daniel Sage
Leeds Centre for Technical Textiles	Steve Russell
MADE-BY	Allanna McAspurn / Bushra Sarker / Charline Ducas
Marks & Spencer's	Rowland Hill
Nike	Amber Bechrouri / Jim Goddard
Oxfam	Barney Tallack
RSPCA	David Bowles
Recyclatex	Terry Ralph
Sainsbury's	Lucy Drage
Salvation Army Trading (SATCoL)	Paul Ozanne / Nigel Hanger
Society of Dyes and Colourists	Andrew Filarowski
Sort UK	Martin Wilcox
Sustainable Fashion Business Consortium Hong Kong	Pat-Nie Woo
Tesco	Abi Rushton
Textile Institute	Vanessa Knowles / Stephanie Dick
Textile Recycling Association (TRA)	Alan Wheeler
T Shirt and Sons	Andrew Lunt
UK Fashion and Textiles	Adam Mansell
Reducing the Impact of Textiles on the Environment (RITE) Group	Phil Patterson / Richard Blackburn / John Mowbray
WRAP (Waste & Resources Action Programme)	Gerrard Fisher

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