

SUSTAINABLE CLOTHING ROADMAP:

SUMMARY OF DEFRA COMMISSIONED PROJECTS UNDER THE SUSTAINABLE CLOTHING ACTION PLAN

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1.0 INTRODUCTION

As part of the actions Defra has agreed to do under the Sustainable Clothing Roadmap the following evidence projects have been commissioned which are intended to inform Defra and other interested clothing supply chain stakeholders:-

- The Role and Business Case for Existing & Emerging Fibres in Sustainable Clothing
- Maximising Reuse and Recycling of UK clothing and textiles
- Reducing the Environmental impact of clothes cleaning.
- Public Understanding of Sustainable Clothing.

Defra also secured funding through the International Sustainable Development Fund under the UK : India Sustainable Development Dialogue and in conjunction with the Indian Ministry of the Environment and Forests and Ministry of Textiles for two projects between India and the UK on the topics:-

- Sustainable Design
- Eco-efficiency in Indian Dye houses.

This document provides a summary of these projects to include the contractors running them and Steering Groups participating. Stakeholders from the Sustainable Clothing Roadmap who expressed their interest were invited to participate on the project Steering Groups . Their 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 a project dissemination meeting to discuss the findings and next steps.

On completion project reports are published on the Clothing Roadmap website <http://www.defra.gov.uk/environment/consumerprod/products/clothing.htm>

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2.0 EVIDENCE PROJECT: *The Role and Business Case for Existing & Emerging Fibres in Sustainable Clothing*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Contractor:	Central Science Laboratories, Leeds University and DeMontford University
Defra Research Manager:	Heather Collie
Timeline:	Dec 2008 – Sept. 2009
Summary	This project will identify the sustainability pros and cons of traditional fibres currently used in clothing as well as emerging fibres. The role, capacity and business case for traditional and emerging fibres is to be determined. This will facilitate a better understanding of the possible trade-offs that industry will face when trying to make more sustainable choices.

Steering & Stakeholder Group

Name	Surname	Organisation	Project Steering group	Project stakeholder group
Charline	Ducas	Adidas		Y
Angus	Pendrich	Arcadia Group		Y
Karen	Whittingham	Avery Dennison		Y
Dr. Rolf	Wittlinger	BASF, Product Safety Performance Chemicals for Textiles	Y	
Soren	Laursen	Bestseller, Denmark	Y	
Mike	Betts	Better thinking		Y
Richard	Poole	British Wool Marketing Board, UK	Y	
Jane	Ashdown	Burton		Y
Sandy	MacLennan	C.L.A.S.S.		Y
Phil	Patterson	Colour Connections		Y
Graham	Burden	Consultant UK, ex M&S	Y	
Mariusz	Stochaj	Continental Clothing Company Ltd		Y
Martin	Bentham	Courtaulds UK Ltd		Y
Iris	Andersen	DECC		
Jocelyn	Whipple	Del Forte Denim		Y
Anna	Harvey	Devan-PPT Chemicals Ltd		Y
Deborah	McGurk	DFID		Y
John	Easton	DyStar UK Ltd		Y
Annie	Sherburne	Ecological Thread, The (Kingston		Y

		University)		
John	Mowbray	Ecotextile News		Y
Rebecca	Atwood	Environmental Justice Foundation		Y
Pamela	Daniels	Ethical Fashion Forum		Y
Victoria	Morton	Fairtrade Foundation, The		Y
John	Danes	Fat Face Ltd		Y
William	Lana	Greenfibres		Y
Henrik	Lampa	H&M Hennes & Mauritz AB		Y
Samantha	Pickering	Hemp Fabric UK		Y
Alison	Atkins	Howies		Y
Linda	Gallagher	Intertek Labtest (UK) Leicester		Y
Manos	Sifakis	Intertrad Group		Y
Les	Jacques	Invista	Y	
Kate	Fletcher	Kate Fletcher Designs		Y
Michael	Kininmonth	Lenzing	Y	
Dilys	Williams	London College of Fashion		Y
Alberto	De Conti	LS&CO		Y
Mark	Sumner	Marks & Spencer	Y	
Gillian	Lipton	Monsoon		Y
Anita	Nagarajan	MOSAIC Fashions		Y
Kirstin	Samuel	Mumo Ltd		Y
Eamonn	Tige	NatureWorks	Y	
Shammy	Jacob	Nike EMEA		Y
Eraina	Duffy	Nike EMEA		Y
Clare	Hussey	Clothing Researcher		Y
Nick	Morley	Oakdene Hollins/Centre for Remanufacturing and Reuse		Y
Damien	Sanfilippo	Pesticide Action Network UK		Y
Josie	Cartridge	Sainsburys		Y
Sally	Cowan	Sally Cowan Ltd		Y
Paul	Ozanne	Salvation Army Trading		Y
Gareth	Coates	SMART Loughborough University		Y
Andrew	Filarowski	Society of Dyers and Colourists		Y
Lee	Holdstock	Soil Association, UK	Y	
Torben	Kehne	Systain, Germany		Y
Jonathan	Lunt	T Shirt and Sons		Y
Ray	Harwood	TEAM De Montfort	Y	
Miles	Marchant	Teijin		Y
Tara	Young	Tesco		Y
Alan	Wheeler	Textile Recycling Association		Y
Lucy	Siegle	The Observer		Y

Subhash	Anand	University of Bolton		Y
Sandy	Black	University of the Arts London & London college of Fasion		Y
Kate	Wells	University of Ulster		Y
Martin	Gregson	Xeros Ltd		Y
Brian	Bennett	Independent		Y
Vanessa	Parr	Fairtrade Foundation UK		
Verana	Radulovic	US EPA		Y
Content	Nicola	WRAP		Y

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3.0 EVIDENCE PROJECT: *Maximising Reuse and Recycling of UK Clothing and Textiles*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Contractor:	Oakdene Hollins and MEL Research
Defra Research Manager:	Heather Collie
Timeline:	November 2008 - Sept 2009
Summary	<p>The aim of this project is to report up-to-date, comprehensive and robust data on the quality and quantity of clothing and textiles waste in the UK, and present and evaluate strategies for increasing reuse and recycling (both upcycling and downcycling) rates within a sustainable approach (closing the loop). This will include a detailed assessment of the barriers and enablers to maximising reuse and recycling, the technical feasibility of options, the infrastructure requirements, and the examples of best practice from overseas.</p> <p>The outputs from this project will contribute to both Defra's and clothing roadmap stakeholders' knowledge on the feasibility in terms of economics and environment for various End-of-Life options for this waste stream. The study will also identify key recommendations for intervention in order to optimise technologies and develop markets for clothing and textiles items and their constituent materials, thus increasing the volume that is diverted from landfill in the UK.</p>

Steering Group

Name	Surname	Organisation
Garth	Ward	Aestiva Ltd
Lekha	Klouda	Association of Charity Shops
David	Moir	Association of Charity Shops
Ian	Woods	Bag2School
Ted	Childs	Bag2School
Jenny	Yates	BCR Global Textiles limited
Kerry	Vitalis	BERR
Jonathan	Bain	BIO Intelligence Service S.A.S.
Kate	Chappell	Carpet Recycling UK
Kate	Goldsworthy	Chelsea College of Art & Design
Alison	Carey	Chris Carey Collections
Michael	Lomotey	Clothes Aid
Laurie	Hollande	Clothes Aid
Clare	Hussey	Clothing Researcher
Anita	Ahuja	Conserve India
Sean	Ryan	Defra
Iris	Anderson	DECC
Justin	French-Brooks	Environmental Services Association (ESA)
Gruttner	Henrik	European Textile Rental Association- Consultant
Simon	Fry	Fenland Laundries
Michael	Dipple	Field Textiles Limited
Orsola	De Castro	From Somewhere
Philip	Geller	I & G Cohen Limited
Brian	Lamb	Incorporatewear
Les	Jacques	Invista
Connie	Hensler	Interface
Louise	Jamison	Jamison Consulting
Kate	Fletcher	Kate Fletcher
Amy	Twigger Holroyd	Keep and Share
Nigel	Hanger	Kettering Textiles
Ross	Barry	LMB - textile reuse and recycling
Michelle	Goggi	LMB -360degrees textile recycling
Sandy	Black	London College of Fashion
Mike	Lee	Loughborough University
Philippa	Roberts	Low and Behold
Rowland	Hill	Marks & Spencer
Matt	Kelly	Marks & Spencer

Mathias	Jason	Mathias and Sons
Sarah	Dagwell	Medway Council
Greg	Cochran	Microclean
		Next Retail Ltd
Marcus	Fitch Peyton	Next Best Clothing
Nora	Harper	NHS
Miles	Merchant	NI Teijin Shoji Europe Gmbh
Amber	Price	Nike EMEA
Shammy	Jacob	Nike EMEA
Tom	Fisher	Nottingham Trent University
Barney	Tallack	Oxfam
Michael	Taylor	Oxfam
Tony	Clark	Oxfam Wastesavers
Taskeen	Ahmed	Precycle Group
Gerald	Clemmell	Ragtex UK
Ray	Georgeson	Ray Georgeson Resources
Clare	Reed	Reed Carpet Recycling
Julian	Parfitt	Resource Futures
Paul	Ozanne	Salvation Army Trading Co Ltd
Tim	Cooper	Sheffield Hallam University
Peta	Johnson	SITA UK
Gareth	Coates	SMART Loughborough Uni
Shahin	Rahimifard	SMART Loughborough Uni
Jane	Harwood	TEAM Research Group
Huw	Clifford	Tesco
Jonathan	Gorman	Tesco
Tara	Luckman	Tesco
Terry	Ralph	Textile Recycling Association
Alan	Wheeler	Textile Recycling Association
Leigh	McAlea	TRAID
Maria	Chenoworth-Casey	TRAID
Linda	McCarty	University of Reading
Lucy	Norris	University College London
Dr. Pammi	Sinha	University of Manchester
Martin	Wilcox	Wilcox Textiles
Alan	Arrowsmith	Wilcox Textiles
Liz	Cooper	WRAP
Peter	Maddox	WRAP
Nicola	Content	WRAP

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4.0 EVIDENCE PROJECT: *Reducing the Environmental impact of Clothes Cleaning*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Contractor:	Bio Intelligence Services, Intertek and Giraffe
Defra Research Manager:	Heather Collie
Timeline:	Dec 2008 – Sept. 2009
Summary	<p>This project has identified, and will analyse and assess options to reduce the energy, water and chemicals intensity of clothes cleaning. Information on current cleaning methods has been collected and will be analysed, and the environmental impacts of these methods (including potential trade-offs) assessed. Technologies considered include fibres and their coatings, laundry detergents and their packaging, washer and dryer technologies, low/non solvent dry cleaning and final assembly of clothes.</p> <p>The best options to reduce the impacts of clothes cleaning, in consideration of consumer behaviour and societal trends, will be identified and recommendations made for consumer facing instruments, awareness campaigns and regulatory/legislative interventions.</p>

Steering Group

Name	Surname	Organisation
Adam	Mansell	British Apparel & Textile Confederation BATC & Home Laundering Consultative Council (HLCC)
Chris	Reynolds	CIA
Grant	Gahagan	Defra (Water)
Patrice	Mongelard	Defra (Chemicals)
Paula	Owen	Energy Saving Trust / Defra
Les	Jacques	Invista
Ian	Morris	Marks & Spencer
		Next Retail Ltd
John	Bailey	P&G/Future Friendly
Graham	Catton	Unilever
Andy	Williams	UK Cleaning Products Industry Association (High Level Group)
Sandy	Black	University of the Arts London + London College of Fashion

Peter	Newport	Chemical Business Association
Brian	Bennet	Independent
Giulio	Sironi	Antonio Merloni Group
Lucy	Yates	Consumer Focus
Jeppe	Frydendal	Eco-labelling Denmark, Danish Standards
Clare	Norman	Tesco
Richard	Blackburn	Leeds University
Derek	McKelvey	Deltec Inc Ltd.
Angus	Pendrich	Arcadia Group

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5.0 EVIDENCE PROJECT: *Public Understanding of Sustainable Clothing*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Contractor:	Nottingham Trent University and Sheffield Hallam University
Defra Research Manager:	Rachel Muckle
Timeline:	February - November 2008 (complete)
Summary	<p>A qualitative project investigating public understanding of sustainable clothing. This research sets out people's current understanding of sustainable clothing and explores their response to behaviours that may mitigate impacts of their clothes buying, maintenance and disposal. Using focus group methods with a deliberative follow up element the research explored: People's aspirations in relation to clothing – what would they like to buy and wear, and what might nudge their aspirations towards a more sustainable picture; People's assumptions of 'good clothing'; People's understanding of sustainable clothing; and People's expectations of government and industry.</p> <p>Full report available at: http://www.defra.gov.uk/environment/business/scp/research/themes/theme3/sustain-consump0708.htm</p>

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6.0 India /UK Clothing Projects under the Sustainable Development Dialogue

PROJECT 1: *SUSTAINABLE DESIGN*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Manager:	Alice Cohen, Defra
Project Contractor:	Centre for Sustainable Design
Timeline:	2009-2011
Summary	Demonstration project exploring the market opportunities for using Indian ecological textiles, build capacity in the sustainable textiles market and thereby offer sustainable fashion to the UK and India retail markets both through the research and development projects and through the choice of dissemination channels. A promotional film and exhibit are two deliverables of the project. Clothes designed during the project may also be sold on the UK market.

PROJECT 2: *ECO-EFFICIENCY IN INDIAN DYEHOUSES*

Project Lead:	Dorothy Maxwell, Sustainable Clothing Roadmap
Project Manager:	Alice Cohen, Defra
Project Contractor:	Colour Connections Ltd.
Timeline:	2009-2011
Summary	A demonstration project working with a range of dyehouses in India that supply the UK market (including Tesco and Marks & Spencer), to share best practice and to increase uptake of new and existing tools and metrics to improve environmental performance. These include the newly developed ICE Compliance Scheme (being trialled by major retailers and brands, including Tesco) and AFIRM (Apparel and Footwear International) Global Standards on hazardous substances. Best Practices and Lessons Learnt are to be disseminated through a publicly available report and dissemination workshops in India and the UK. These will include stakeholders in the UK Sustainable Clothing Roadmap, Indian Textile Institute, AFIRM and RITE Group Members.

Steering Group

Name	Surname	Organization
K. K.	Argarwal	Alps Industries Ltd
Vijay	Mathur	Apparel Export Promotion Council & Ministry of Textiles
Vimal	Kirti Singh	Apparel Export Promotion Council
Peter	Davis	British Plastics Federation
Anita	Ahuja	CONSERVE
Laila	Tyabji	Dastakar
Hannah	Schellander	Defra
Arif	Hussain	DfID
Deborah	McGurk	DfID
Annie	Sherburne	Ecological Thread, The (Kingston University)
Dan	Rees	Ethical Trading Initiative
Vanessa	Parr	Fairtrade Foundation, The
Rita	Sharma	FCO (Delhi)
Lakshmi	Bhartia	Gap (India)
Vinod	Shanbhag	Hon Secretary Northern Indian Textile Institute (NITI) and Academic Advisor Pearl Academy
Jaana	Quaintance	Impactt
Dr V.K.	Kothari	India Institute of Technology
Vijay	Chaturvedi	International Foundation of Fashion Technology Institutes
Dilip	Gianchandani	Intertek
Louise	Jamison	Jamison Consulting
Katherine	Hamnett	Katherine E Hamnett
Amy	Twigger Holroyd	Keep and Share
Martin	Hearson	Labour Behind the Label
Bruce	Bergstrom	Li and Fung
Shekhar	Argarwal	Maral Overseas Limited
Ravi	Seshadri	Marks and Spencer
Sameer	Shrivastatava	Ministry of Environment and Forests (India)
Hem	Pande	Ministry of Environment and Forests (India)
Saheli	Ghosh Roy	Ministry of Environment and Forests (India)
Sally	Child	Monsoon Accessorize
Gillian	Lipton	Monsoon Accessorize.
Derek	Jackson	Monsoon Accessorize.
Anita	Nagarajan	MOSAIC Fashions
Kusum	Tiwari	Mura Collective
Sanjay	Gupta	National Fashion Institute of Technology (India)
Rathi	Vinay Jha	Pearl Academy

Shreyaskar	Chaudhary	Pratibha
Rajan	Gandhi	SAG
Ullhas	Nimkar	Society of Dyers and Colourists Texanlab Laboratories Pvt Ltd
Tara	Luckman	Tesco
Ruchi	Agarwal	UKTI
Silvia	Ferratini	UNEP
Claire	Hamer	Independent

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7.0 FURTHER INFORMATION

Dr. Dorothy Maxwell, Lead Sustainable Clothing Roadmap (Consultant, GVSS Ltd.)

Sustainable Clothing Roadmap Contact Details:-

dorothy.maxwell@DEFRA.GSI.GOV.UK / products@DEFRA.GSI.GOV.UK

Defra Sustainable Products and Consumers

Website: <http://www.defra.gov.uk/environment/consumerprod/products/clothing.htm>