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## ANNEX 1

### LITERATURE REVIEW OF LCA STUDIES IN TEXTILE SECTOR

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Authors	Title	Year	Edition		
Ingrid Ciabatti, Gianluca Ciardelli, Manuele Marcucci	Riutilizzo degli effluenti tessili mediante Ozono: il caso del Lanificio Pecci	2001	Innovare, 1		
M. Marcucci, G. Ciardelli, I. Ciabatti, A. Bottino	New Approaches for the treatment and reuse of textile effluents based on different membrane	2000	6th Nordic Filtration Symposium		
Kim Christiansen	Use of life cycle assessment in Textile Service				
Eija Kalliala, Päivi Talvenmaa	Environmental profile of textile wet processing in Finland	2000	Journal of Cleaner Production 8, pp 143-154		
	English abstract of the Danish Environmental Protection Agency Project: Reuse of Process Water from Reactive Dyeing of Cotton	1998	Miljøprojekt Nr. 374		
	Decisione della Commissione che stabilisce i criteri per l'assegnazione di un marchio comunitario di qualità ecologica ai prodotti tessili (1999/178/CE)	1999	Gazzetta ufficiale delle Comunità europee L57/21-30, 5/3/1999		
Franklin Associates	Life cycle analysis (LCA): woman's knit polyester blouse	1993	Final Report		
Roberto Bianchi, Giovanni Bergna, Roberto Canziani	Automation and management system for the operation of three wastewater treatment plants in the province of Como	2000	Proceedings of SIDISA, International Symposium on Sanitary and Environmental Engineering, Trento 18-23 September 2000		
R. Bresaola Junior, D.L. Cantelli	Wastewater treatment and reuse in textile industrial process	2000	Proceedings of SIDISA, International Symposium on Sanitary and Environmental Engineering, Trento 18-23 September 2000		
Proto M, Supino S, Malandrino O	Cotton: a flow cycle to exploit	2000	Industrial crops and products, vol. 11 pp 173-178, march 2000		
Bretz, R. Frankhauser, P.	Screening LCA for Large Numbers of Products: Estimation Tools to Fill Data Groups	1996	International Journal of LCA (3), pag (139-146), (1996)		
Scheringer Martin; Hungerbühler Konrad; Almut Beck	Fate Modelling Within LCA. The Case of Textile Chemicals	2000	International Journal of LCA (6); pag (335-344), (2000)		
A.J. Abma	A greener shade of red: Environmental life cycle assessment of red textile dyes; alizarin from madder and synthetic dyes	1998	Chemiewinkel/IVEM, Rijksuniversiteit Groningen		
TEX CHANGE NET	Expert Network for the Effects of the European Textile Industry on Global Change.		power point presentation; <a href="http://www.tex-change-net.org">http://www.tex-change-net.org</a>		
	Best Management practices for pollution prevention in the textile industry	1996	Manual, EPA/625/R-96/004; September 1996		
Charles Tomasino	Chemistry & technology of fabric preparation & finishing	1992	Department of textile engineering, chemistry and science college of textiles north Carolina state university		
	Emission Estimation technique manual for textile and clothing industry	1999	National Pollutant Inventory, July 1999		
Nicholas MJ, Clift R, Azapagic A, Walker FC, Porter DE	Determination of 'best available techniques' for integrated pollution prevention and control: A life cycle approach	2000	Trans IChemE, vol 78, Part B, May 2000		
G. Ciardelli, L. Corsi, M. Marcucci	Membrane separation for wastewater reuse in the textile industry	2000	Resources, Conservation and Recycling 31, 189-197		
G. Ciardelli, N Ranieri	The treatment and reuse of wastewater in the textile industry by means of ozonation and electro flocculation	2001	Wat. Res. Vol 35. No 2 pp567-572		
Soren Ellebak laursen, John Hansen, John Bagh, Ole K. Jensen, Inge Werther	Environmental assessment of textiles: life cycle screening of textile containing cotton, wool, viscose, polyester, or acrylic fibres	1997	Environmental Project No. 369		

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Authors	Title	Year	Edition
Xin Ren	Development of environmental performance indicators for textile process and product	2000	Journal of Cleaner Production, No 8, pp 473-481
Deo HT	Ecofriendly textile production	2001	Indian journal of fibre & textile research 26, pp 61-73 mar-jun 2001
Mehalik mm	Sustainable network design: a commercial fabric case study	2000	Interfaces, 30, pp 180-189, may jun 2000
Vangeenhuizen M, Vanderkaap B	Dutch textile-industry in a Global Economy	1994	Regional Studies, 28, pp 695-711, Nov 1994
Kuusinen TL, Barker RH, Alexander DA	Life cycle assessment in woven textiles	1998	Tappi journal, 81, pp 179-182, Mar 1998
	backgroundreport_sep2001	2001	Draft report
	The development of Climatex ®lifecycle; compostable, environmental sound upholstery fabrics and the next generation of Climatex ®lifeguardFR upholstery fabrics; flame-retard, safe for biological cycle, enabling a new dimension in product safety		Climatex
	Vejen til bedre miljØ ved produktion af tekstiler	2000	Danish EPA 50-2000: MiljØnyt, Nr 50
	Reuse of Process Water from Reactive Dying of Cotton (summary)	1998	Danish EPA 374-98
Eija Kalliala, D. Sc.	THE ENVIRONMENTAL INDEX MODEL FOR TEXTILES AND TEXTILE SERVICES		Tampere University of Technology, Dept. of Fibre, Textile and Clothing Science, PO Box 527, 33101 Tampere, Finland & University
	Textile case: Reactive dyeing of cotton		European Environmental Agency; <a href="http://reports.eea.eu.int/TEC01/en/6.html">http://reports.eea.eu.int/TEC01/en/6.html</a>
I. Colman	Eco-efficient Design of textile Products and Processes		Ghent University, Department of Textiles (RUG)
	Environmental sound ways to dye cotton	1998	Download <a href="http://www.mst.dk/homepage/">http://www.mst.dk/homepage/</a>
Carsten Schulze, Almut Jodicke, Martin Scheringer, Manuele Marghi, Olivier Jolliet, Konrad Hungerbuhler, Michael Matthies	Comparison of different life-cycle impact assessment methods for aquatic ecotoxicity	2000	Environmental Toxicology and Chemistry, Vol 20, No 9 pp 2122-2132,
M. Beier, T. Gigerl, D. Wendler, K. -H Rosenwinkel	Life Cycle Assessment of sludge and waste water treatment within two German-Japanese co-operation project	1999	Institut fur Siedlungswasserwirtschaft und Abfalltechnik Universitat Hannover
	Minimisation of water consumption in European textile dyeing and printing industry using innovative washing and water recycling		Download <a href="http://ica.cordis.lu/search/index.cfm?fuseaction=proj.simplerule&amp;PJ_RCN=5057424&amp;CFID=161216&amp;CFTOKEN=78777085">http://ica.cordis.lu/search/index.cfm?fuseaction=proj.simplerule&amp;PJ_RCN=5057424&amp;CFID=161216&amp;CFTOKEN=78777085</a>
Jimenez-Gonzalez C, Overcash MR, Curzons A	Waste treatment modules - a partial life cycle inventory	2001	JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY. No76: (7) 707-716 JUL 2001
MORSE GK, PERRY R, LESTER JN	THE LIFE-CYCLE ENVIRONMENTAL-IMPACT OF KEY DETERGENT BUILDER SYSTEMS IN THE EU	1995	SCIENCE OF THE TOTAL ENVIRONMENT, No 166: (1-3) 179-192 APR 21 1995
Dennison FJ, Azapagic A, Clift R, Colbourne JS	Assessing management options for wastewater treatment works in the context of life cycle assessment	1998	WATER SCIENCE AND TECHNOLOGY, No 38: (11) 23-30 1998
Franke M, Kluppel H, Kirchert K, Olszewski P	Life-cycle-assessment - Life-cycle inventory for detergent manufacturing	1995	TENSIDE SURFACTANTS DETERGENTS, No 32: (6) 508-514 NOV-DEC 1995

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PITTINGER CA, SELLERS JS, JANZEN DC, KOCH DG, ROTHGEB TM, HUNNICUTT ML	ENVIRONMENTAL LIFE-CYCLE INVENTORY OF DETERGENT-GRADE SURFACTANT SOURCING AND PRODUCTIO		JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, No70: (1) 1-15 JAN 199
Hwang Y, Hanaki	The generation of CO <sub>2</sub> in sewage sludge treatment systems: life cycle assessment	2000	WATER SCIENCE AND TECHNOLOGY, No 41: (8) 107-113 2000
Bridle T, Skrypski-Mantel	Assessment of sludge reuse options: a life-cycle approach	2000	WATER SCIENCE AND TECHNOLOGY, No 41: (8) 131-135 2000
Zhang Z, Wilson	Life-cycle assessment of a sewage-treatment plant in South-East Asia	2000	JOURNAL OF THE CHARTERED INSTITUTION OF WATER AND ENVIRONMENTAL MANAGEMENT, No 14: (1) 51-56 FEB 2000
Mels AR, van Nieuwenhuijzen AF, van der Graaf JHJM, Klapwijk B, de Koning J, Rulkens WH	Sustainability criteria as a tool in the development of new sewage treatment methods	1999	WATER SCIENCE AND TECHNOLOGY, No 39: (5) 243-250 1999
EMMERSON RHC, MORSE GK, LESTER JN	THE LIFE-CYCLE ANALYSIS OF SMALL-SCALE SEWAGE-TREATMENT PROCESSES	1995	JOURNAL OF THE CHARTERED INSTITUTION OF WATER AND ENVIRONMENTAL MANAGEMENT, No 9: (3) 317-325 JUN 1995
Bretz R, Fankhauser P	Life-cycle assessment of chemical production processes: A tool for ecological optimization	1997	CHIMIA, No 51: (5) 213-217 MAY 1997
Felber H, Wampfler B	Chemical analysis in the life cycle of products	1997	CHIMIA, No 51: (10) 797-799 OCT 1997
Lundin M, Bengtsson M, Molander S	Life cycle assessment of wastewater systems: Influence of system boundaries and scale on calculated environmental loads		ENVIRONMENTAL SCIENCE & TECHNOLOGY, No 34: (1) 180-186 JAN 1 2000
Roeleveld PJ, Klapwijk A, Eggels PG, Rulkens WH, vanStarkenburg W	Sustainability of municipal wastewater treatment		WATER SCIENCE AND TECHNOLOGY, No 35: (10) 221-228 1997
Scheringer Martin; Hungerbühler Konrad; Almut Beck	Environmental Impacts of Chemicals in cotton Processing Chain		Download <a href="http://www.tech.chem.ethz.ch/hungerb/">http://www.tech.chem.ethz.ch/hungerb/</a>
Nijdam D, Blom J, Boeren JA	Environmental Life Cycle Assessment (LCA) of two advanced wastewater treatment techniques	1999	Adsorption and its applications in industry and environmental protection, vol II: applications in environmental protection, No 120, pp 763-775
	Life cycle in sale, design and product development	2000	Download <a href="http://www.mst.dk/homepage/">http://www.mst.dk/homepage/</a> Miljøprojekt nr. 545