

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name **DAHLBO (NÉE POUTANEN), TARJA HELENA**
Address **KATAJANOKANRANTA 17 G 68, FI-00160 HELSINKI, FINLAND**
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E-mail **Helena.dahlbo@ymparisto.fi**
Nationality **Finnish**
Date of birth **31ST OCTOBER 1963**

WORK EXPERIENCE

- Dates (from – to) 1998 -
• Name and address of employer Finnish Environment Institute, P.O. Box 140, FI-00251 Helsinki, Finland
• Type of business or sector Environmental research
• Occupation or position held Senior Researcher
• Main activities and responsibilities Research and development on material and waste management and recovery, LCA and sustainability assessments on waste recycling, recovery and treatment, Certification of environmental sampling personnel

- Dates (from – to) 1995 - 1998
• Name and address of employer Regional Environment Centre of Häme (at present Pirkanmaa Centre for Economic Development, Transport and the Environment),
P. O. Box 297, FI-33101 Tampere, Finland
• Type of business or sector Regional environmental administration
• Occupation or position held Senior Researcher
• Main activities and responsibilities Research on landfill disposability of wastes, waste prevention and contaminated soil sites

- Dates (from – to) 1995
• Name and address of employer Finnish Environment Institute (see above)
• Type of business or sector Environmental research
• Occupation or position held Expert, contaminated soil sites
• Main activities and responsibilities Evaluation of restoration needs for contaminated soil sites

- Dates (from – to) 1989 - 1994
• Name and address of employer National Board of Waters and the Environment (predecessor of the Finnish Environment Institute)
• Type of business or sector National environmental administration
• Occupation or position held Researcher, Senior Researcher
• Main activities and responsibilities Several research projects on wastes and waste management, a master's thesis

EDUCATION AND TRAINING

- Dates (from – to) 1983 - 1989
- Name and type of organisation providing education and training University of Helsinki, Faculty of Agriculture and Forestry
- Principal subjects/occupational skills covered Environmental Science and Policy, Limnology, Microbiology, Chemistry
- Title of qualification awarded M. Sc. (Environmental Sciences)

- Dates (from – to) 2014 – 2018
- Name and type of organisation providing education and training Aalto University School of Engineering, Dept of Built Environment, Environmental Engineering
- Principal subjects/occupational skills covered Doctoral dissertation titled “Life cycle approaches in assessing waste management options in the Finnish context”
- Title of qualification awarded D. Sc. (Tech.)

- Dates (from – to) 1990 - 2018
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered Several academic and non-academic courses in environmental issues, waste management, life cycle assessment, ICT and languages
- Title of qualification awarded

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

FINNISH

OTHER LANGUAGES

ENGLISH

- Reading skills
- Writing skills
- Verbal skills

EXCELLENT

GOOD

GOOD

SWEDISH

- Reading skills
- Writing skills
- Verbal skills

EXCELLENT

GOOD

GOOD

GERMAN

- Reading skills
- Writing skills
- Verbal skills

BASIC

BASIC

BASIC

RUSSIAN

- Reading skills
- Writing skills
- Verbal skills

BASICS

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ORGANISATIONAL SKILLS AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

- Project coordinator and team leader in several research projects, such as:
 - "Environmental and economic impacts from recycling of combustible wastes", 2006 – 2008, Participating organizations: Finnish Environment Institute, University of Helsinki, Tampere University of Technology, Åbo Akademi University, Helsinki University of Technology, the Finnish Solid Waste Association; Role: Responsible researcher and coordinator of the project.
 - "Adaptation of business activities to the requirements of climate change mitigation - case carrier bags", 2008 – 2009, Participating organizations: Finnish Environment Institute and Lappeenranta University of Technology; Role: Responsible researcher and coordinator of the project.
 - "Advanced solutions for recycling complex and new materials", 2010-2012. Participating organizations: VTT Technical Research Centre (coordinator), Finnish Environment Institute SYKE, Aalto University, Lappeenranta University of Technology; Role: coordinator of the work at SYKE, responsible for LCA assessments for several waste management and recovery value chains.
 - "LCA model for biowaste management in the Helsinki metropolitan area", 2013-2014. Coordinator Finnish Consulting Group; Role: Responsible for life cycle impact assessment modelling.
 - "Opportunities and hindrances of textile waste recycling", 2013-2015. Participating organizations: Finnish Environment Institute, National Consumer Research Center, Häme University of Applied Sciences, UFF rf; Role: Responsible researcher and coordinator of the project, LCA assessments.
 - "Material value chains", ARVI research programme, 2014-2017. Participating organizations: 18 companies and 11 research or public organisations. Role: coordinator of the work in R&D for more efficient plastics recycling.
 - "Recycled Plastics in 3D-printing - laboratory for development", 2016-ongoing. Coordinator Turku University of Applied Sciences, partner Arcada University of Applied Sciences. Role: Responsible researcher for LCA assessments of centralized and decentralized production systems.
 - "Waste cooperation between BEAC WGE and ACAP", AB-Waste, 1/2017 – 12/2018. Role: Coordinator of the project.
 - "From waste to secondary raw materials", EPA Network IG GCE, project 2017, Role: Coordinator of the project.
- Participation in several research and development projects on waste management and circular economy applying LCA and LCT on various waste management systems, waste streams (MSW, biowaste, packaging, plastics, textiles, C&DW), product systems and business models.
- Organization of national and international seminars and meetings (during 2017-2018: two waste seminars in Russia and a study tour for Russian waste experts to Finland)
- Lecturing in Finnish and in English in academic and other courses and seminars
- National representative in the working group for sampling of wastes (CEN/TC 292/WG1)1992 - 2014
- Secretary for the Advisory Board for Wastes (Ministry of the Environment), 1995 – 1998; Member of the group 2008 - 2011
- National representative in the ad hoc group for Hazardous Substances in Wastes (Nordic Council of Ministers, Group for Products and Wastes) 1997 – 2000
- Member of the national expert group for landfills (Ministry of Environment) 2000 – 2002
- Member and vice chairman of the inspection body for the certification of personnel for environmental sampling, 19.12.2003 -
- Member of the expert group for the research and development programme for the use of mineral residues in earth construction (Ministry of the Environment, Finland), 2007 – 2010
- Member of the International expert group for LCA for waste management (IEG), 2010 –
- Coordinator (2012-2013) and member (2012 -) of the national expert group for LCA for waste management
- National representative in the Nordic waste group (Nordic Council of Ministers, Waste group), 2011 – 2018, chairman of the Nordic waste group in 2018
- National representative in the Barents Euro-Arctic Co-operation Working Group on Environment (WGE) Subgroup on Hotspots Exclusion (SHE) from 09/2017 –

TECHNICAL SKILLS AND COMPETENCES <i>With computers, specific kinds of equipment, machinery, etc.</i>	Good skills in Microsoft Office and Vista systems.
DRIVING LICENCE(S)	Passenger car
ADDITIONAL INFORMATION	Reviewer for the journals: Waste Management, Journal of Cleaner Production and Resources Conservation and Recycling.
ANNEXES	ANNEX 1, LIST OF PUBLICATIONS OF HELENA DAHLBO

Helena Dahlbo

Most important publications 2005 – 2018

1. ARTICLES IN INTERNATIONAL SCIENTIFIC JOURNALS, THESIS AND SCIENTIFIC CONFERENCE PROCEEDINGS WITH REFEREE PRACTICE

[1] Dahlbo, H., Koskela, S., Laukka, J., Myllymaa, T., Jouttijärvi, T., Melanen, M., Tenhunen, J. 2005. Life cycle inventory analyses for five waste management options for discarded newspaper. *Waste Management & Research*, 22(4): 291-303. ISSN 0734-242X.

[2] Dahlbo, H., Ollikainen, M., Koskela, S. & Melanen, M. 2005. The value of old news – managing discarded newspaper. *Waste Management World*, May-June 2005: 75-81.

[3] Antikainen, R., Dahlbo, H., Melanen, M. & Ollikainen, M. 2005. Decision support approaches: life cycle assessment (LCA) and substance flow analysis (SFA). In: Jalkanen, A. & Nygren, P. (eds.): *Sustainable use of renewable natural resources — from principles to practices*. University of Helsinki Department of Forest Ecology Publications 34. e-publication. <http://www.helsinki.fi/mmtkd/mmeko/sunare>

[4] Dahlbo, H., Ollikainen, M., Peltola, S., Myllymaa, T. & Melanen, M. 2007. Combining ecological and economic assessment of options for newspaper waste management. *Resources, Conservation and Recycling* 51(2007):42-63.

[5] Hiltunen, M.-R. & Dahlbo, H. 2007. Material recovery of plastics and textile waste – reducing greenhouse gas emissions? In: Lechner, P. (ed.). *Waste matters. Integrating views*. Proceedings of the 2nd BOKU Waste Conference. Vienna, ABF-BOKU.

[6] Dahlbo, H., Koskela, S., Pihkola, H., Nors, M., Federley, M. & Seppälä, J. 2013. Comparison of different normalised LCIA results and their feasibility in communication. *Int J Life Cycle Assess* 18(4):850-860.

[7] Koskela, S., Dahlbo, H., Judl, J., Korhonen, M.-R. & Niininen, M. 2014. Reusable plastic crate or recyclable cardboard box? A comparison of two delivery systems. *Journal of Cleaner Production* 69(3): 83-90

[8] Dahlbo, H., Bachér, J., Lähtinen, K., Jouttijärvi, T., Suoheimo, P., Mattila, T., Sironen, S., Myllymaa, T., Saramäki, K. 2015. Construction and demolition waste management – holistic assessment of environmental performance. *J of Clean Prod* 107:333-341.

[9] Dahlbo, H., Aalto, K., Eskelinen, H., & Salmenperä, H. 2017. Increasing textile circulation - consequences and requirements. *Sustainable Production and Consumption, Sustainable Utilisation of Waste*, 9:44–57. DOI: 10.1016/j.spc.2016.06.005

[10] Manninen, K., Koskela, S., Antikainen, R., Bocken, N., Dahlbo, H. & Aminoff, A. 2018. Do circular economy business models capture intended environmental value propositions? *J of Clean Prod* 171:413-422.

[11] Dahlbo, H., Poliakova, V., Mylläri, V., Sahimaa, O. & Anderson, R. 2018. Recycling potential of post-consumer plastic packaging waste in Finland. *Waste Manage* 71:52–61. DOI.org/10.1016/j.wasman.2017.10.033.

[12] Dahlbo, H. 2018. Life cycle based approaches in assessing waste management options in the Finnish context. Doctoral dissertation 77/2018, Aalto University, School of Engineering, Department of Built Environment, Environmental Engineering. <http://urn.fi/URN:ISBN:978-952-60-7958-5>.

2. RESEARCH REPORTS, POLICY BRIEFS

[13] Dahlbo, H., Laukka, J., Myllymaa, T., Koskela, S., Tenhunen, J., Seppälä, J., Jouttijärvi, T., Melanen, M. 2005a. Waste management options for discarded newspaper in the Helsinki Metropolitan Area - Life cycle assessment report. *The Finnish Environment* 752.

[14] Myllymaa, T., Dahlbo, H., Ollikainen, M. & Peltola, S. 2005. Menettely jätehuoltovaihtoehtojen ympäristö- ja kustannusvaikutusten elinkaaritarkasteluun. A method for implementing life cycle surveys of waste management alternatives' environmental and cost effects. *Suomen ympäristö* 750. (In Finnish)

- [15] Dahlbo, H. & Joutti, A. 2005. The Finnish certification system for improving the quality assurance in environmental sampling. In: Komppa, V., Wahlström, M., Laine-Ylijoki, J. (eds.): Chemical and Environmental Sampling - Quality through Accreditation, Certification and Industrial Standards. CEN/STAR Trends Analysis workshop in co-operation with Nordic Innovation Centre, Radisson SAS Hotel Brussels, 14 – 15 April 2005. <http://www.nordicinnovation.net/article.cfm?id=1-853-356>
- [16] Myllymaa, T., Tohka, A., Dahlbo, H. & Tenhunen, J. 2006. Ympäristönäkökulmat jätteen hyödyntämisessä energiana ja materiaalina. Valtakunnallinen jätesuunnitelma vuoteen 2016. Taustaselvitys Osa III. (Environmental aspects of energy and material recovery of wastes. National waste plan until 2016. Background document. Part III.) Reports of Finnish Environment Institute 12/2006.
- [17] Isomäki, E. & Dahlbo, H. 2006. Kaatopaikoille sijoitettuihin teollisuuden jätteiden ympäristövaikutusten tunnistaminen ja arviointi. Valtakunnallinen jätesuunnitelma vuoteen 2016. Taustaselvitys Osa IV. (Identification and assessment of environmental impacts associated with landfilled industrial wastes. National waste plan until 2016. Background document. Part IV.) Reports of Finnish Environment Institute 2/2007.
- [18] Korhonen, M.-R. & Dahlbo, H. 2007. Reducing Greenhouse Gas Emissions by Recycling Plastics and Textiles into Products. The Finnish Environment 30/2007. <http://www.ymparisto.fi/download.asp?contentid=74073&lan=en>
- [19] Mroueh, U.-M., Ajanko-Laurikko, S., Arnold, M., Laiho, A., Wihersaari, M., Savolainen, I., Dahlbo, H. & Korhonen, M.-R. 2007. Uusien jätteenkäsittelykonseptien mahdollisuudet kasviuonekaasupäästöjen vähentämisessä [New waste management concepts in the reduction of greenhouse gas emissions]. Espoo 2007. VTT Tiedotteita – Research Notes 2402. <http://www.vtt.fi/inf/pdf/tiedotteet/2007/T2402.pdf>
- [20] Myllymaa, T., Moliis, K., Tohka, A., Isoaho, S., Zevenhoven, M., Ollikainen, M. & Dahlbo, H. 2008. Jätteiden kierrätyksen ja polton ympäristövaikutukset ja kustannukset – jätehuollon vaihtoehtojen tarkastelu alueellisesta näkökulmasta. Suomen ympäristö 39. <http://www.ymparisto.fi/default.asp?contentid=298884&lan=fi>
- [21] Myllymaa, T., Moliis, K., Tohka, A., Rantanen, P., Ollikainen, M. & Dahlbo, H. 2008. Jätteiden kierrätyksen ja polton käsittelyketjujen ympäristökuormitus ja kustannukset. Inventaarioraportti. Suomen ympäristökeskuksen raportteja 28. <http://www.ymparisto.fi/default.asp?contentid=298205&lan=fi>
- [22] Mattila, T., Kujanpää, M., Myllymaa, T., Korhonen, M.-R., Soukka, R. & Dahlbo, H. 2009. Ostoskassien ilmastovaikutusten vähentäminen. (Mitigation of the climate effects of shopping bags). The Finnish Environment 2/2009. (In Finnish, with an English abstract).
- [23] Nors, M., Behm, K., Dahlbo, H., Pajula, T., Pihkola, H., Viluksela, P. & Wessman, H. 2009. Carbon footprint and environmental sustainability of print products. KCL Reports 2934. Confidential, available for the financing parties only.
- [24] Nors, M., Behm, K., Dahlbo, H., Pajula, T., Pihkola, H., Viluksela, P. & Wessman, H. 2009. Carbon footprint of print products. KCL Carbon footprint publication.
- [25] Pihkola, H., Nors, M., Kujanpää, M., Helin, T., Kariniemi, M., Pajula, T., Dahlbo, H. & Koskela, S. 2010. Carbon footprint and environmental impacts of print products from cradle to grave. Results from the LEADER project (Part 1). VTT Tiedotteita - Research Notes : 2560.
- [26] Pihkola, H., Federley, M., Nors, M., Dahlbo, H., Koskela, S., Jouttijärvi, T. 2011. Communicating environmental impacts of print products. Results from the LEADER project (Part 2). VTT Tiedotteita - Research Notes : 2561.
- [27] Koskela, S., Dahlbo, H., Judl, J., Korhonen, M.-R. & Niininen, M. 2012. LCA comparison of two systems for bread packaging and distribution. CLEEN Research Report no D2.5.1.
- [28] Meinander M., Mroueh, U-M. (eds) 2012. Directions of future developments in waste recycling. Writers: Bacher, J., Laine-Ylijoki, J., Wahlström, M., Jermakka, J., Teirasvuori, N., Törn, M., Laaksonen, J., Heiskanen, J., Kaila, J., Vanhanen, H., Dahlbo, H., Saramäki, K., Jouttijärvi, T., Mattila, T., Retkin, R., Suoheimo, P., Lähtinen, K., Sironen, S., Sorvari, J., Myllymaa, T., Havukainen, J., Horttanainen, M. & Luoranen, M. VTT Technology 60. <http://www.vtt.fi/inf/pdf/technology/2012/T60.pdf>
- [29] Myllymaa, T. & Dahlbo, H. 2012. Elinkaariarviointien käyttö Suomen jätehuollon arvioinnissa (The use of life cycle assessments in assessing waste management in Finland). Reports of the Ministry of the Environment 24/2012.

- [30] Moliis, K., Dahlbo, H., Retkin, R. & Myllymaa, T. 2012. Pohjois-Suomen pakkausjätteiden hyödyntäminen – elinkaaren aikaiset ympäristö- ja kustannusvaikutukset. (Recovery of packaging waste in northern Finland – environmental and cost effects on a life-cycle basis). Reports of the Ministry of the Environment 26/2012.
- [31] Dahlbo, H., Retkin, R., Sorvari, J., Lähtinen, K., Mattila, T., Sironen, S., Saramäki, K., Bacher, J., Myllymaa, T. 2013. C&D waste value chain – current performance and needs for future development. Sinks a Vital Element of Modern Waste Management; Proc of the 2nd Int Conf on Final Sinks, 16.-18.5.2013.
- [32] Palm, D., Elander, M., Watson, D., Kiørboe, N., Salmenperä, H., Dahlbo, H., Moliis, K., Lyng, K.-A., Valente, C., Gíslason, S., Tekie, H. & Rydberg, T. 2014. Towards a Nordic textile strategy; Collection, sorting, reuse and recycling of textiles. Nordic Council of Ministers, TemaNord, 538:2014.
- [33] Sundström, H., Kaila, J., Moliis, K., Dahlbo, H. & Myllymaa, T. 2014. Elinkaarimallin kehittäminen HSY:n jätehuollolle. Vaihe I: biojätteen käsittely. (Developing a life cycle model for the assessment of waste management for the Helsinki Region Environmental Services Authority HSY. Phase I: Biowaste management). HSY Waste Management. (In Finnish)
- [34] Palm, D., Elander, M., Watson, D., Kiørboe, N., Salmenperä, H., Dahlbo, H., Moliis, K., Lyng, K.-A., Valente, C., Gíslason, S., Tekie, H. & Rydberg, T. 2014. Towards a Nordic textile strategy; Collection, sorting, reuse and recycling of textiles. Nordic Council of Ministers, TemaNord, 538:2014.
- [35] Palm, D., Elander, M., Watson, D., Kiørboe, N., Salmenperä, H., Dahlbo, H., Rubach, S., Hanssen, O.-J., Gíslason, S., Ingulfsvann, A.-S., & Nystad, Ø. 2015. A Nordic textile strategy: Part II: A proposal for increased collection, sorting, reuse and recycling of textiles. Nordic Council of Ministers, TemaNord, 2015:513.
- [36] Dahlbo, H., Aalto, K., Salmenperä, H., Eskelinen, H., Pennanen, J., Sippola, K. & Huopainen, M. 2015. More efficient re-use of textiles and recycling of textile waste in Finland. The Finnish Environment 4/2015 (In Finnish, with an English abstract).
- [37] Eskelinen, H., Haavisto, T., Salmenperä, H. & Dahlbo, H. 2016. Muovien kierrätyksen tilanne ja haasteet. (Status and challenges of plastics recycling). CLIC Innovation Report no D4.1-3. (In Finnish).
- [38] Judl, J., Manninen, K., Sahimaa, O., Salminen, J., Eskelinen, H., Dahlbo, H. & Väntsi, O. 2016. Wood-polymer composite - a step towards circular economy? Presented at the SUM 2016 – 3rd Symposium on Urban Mining and Circular Economy, 24th May 2016.
- [39] Judl, J., Antikainen, R., Manninen, K. & Dahlbo, H. 2016. Sustainable circular bioeconomy in forest industries – How can LCA support the transition? SETAC LCA CSS 20.-22.2016 Montpellier, France
- [40] Salmenperä, H., Sahimaa, O., Kautto, P., Dahlbo, H., Haavisto, T., Wahlström, M., Bachér, J., Laine-Ylijoki, J., Vahvelainen, S. & Espo, J. 2016. Reaching the waste recycling targets requires significant actions. Policy brief 20/2016 Perspectives into topical issues in society and ways to support political decision making. Governments analysis, assessment and research activities. <http://tietokayttoon.fi/julkaisu?pubid=15102>
- [41] Suominen, J., Virta, M., Laitinen, L., Nurmio, J., Lehtinen, L., Holm, M., Andersson, M., Eskelinen, H. & Dahlbo, H. 2017. Recycled Plastics in 3D printing – Laboratory for Development. Project summary. <https://resurssitehokkuus.turkuamk.fi/uutta-liiketoimintaa/kierratys-3d/>
- [42] Antikainen, R., Dahlbo, H., Koskela, S., Koskiahio, J., Myllymaa, T., Sahimaa, O., Salmenperä, H., Seppälä, J., Putkuri, E. 2017. Shifting from a linear economy to a circular economy. State of the Environment Report 2/2017. <http://hdl.handle.net/10138/187407>
- [43] Dahlbo, H., Salmenperä, H., Neubauer, C., Tregent, M., Hanemaaijer, A., Elgorriaga, A., Antikainen, R., Gössnitzer, A. & Sullivan, A. 2018. Turning waste into secondary materials on the way towards a circular economy. Discussion paper. European Network of the Heads of Environment Protection Agencies (EPA Network) - Interest group on Green and Circular Economy.