

SEPPÖ ILMARI JUNNILA

PERSONAL INFORMATION

- Marital status: married, one child
- Nationality: Finnish
- Age: 38
- Place of Birth: Kiiikka, Finland

EDUCATION

- 2002 - 2004** **Helsinki University of Technology** Helsinki, Finland
Doctor of Technology/Civil and Environmental Engineering
- Grade: Pass with distinction
- 1995 - 1998** **Helsinki University of Technology** Helsinki, Finland
Licentiate in Technology/Civil and Environmental Engineering
- Grade: Pass with distinction
- 1996 - 1997** **Helsinki School of Economics** Helsinki, Finland
Proficiency in Environmental Management
- 1997** **The University of Budapest** Budapest, Hungary
CRE Copernicus Seminar on Environmental and Resource Economics
- 1995** **Université de Savoie** Chambéry, France
French Culture and Language
- 1987 - 1994** **Helsinki University of Technology** Helsinki, Finland
Master of Science in Technology/Civil and Environmental Engineering
- 1992** **Eindhoven University of Technology** The Netherlands
Proficiency in Intercultural Communication and Management
- 1990-91** **Franz Leopold Universität** Innsbruck, Austria
Specializing in Construction Economics and Management

WORK EXPERIENCE

- 2005 -** **Helsinki University of Technology**, Department of
Construction Economics and Management Helsinki, Finland
Senior Research Scientist
- 2002** **University of California, Berkeley**, Department of Civil
and Environmental Engineering Berkeley, California, U.S.A
Visiting Scholar
- 3 academic papers
- 1998 - 2005** **Jaakko Pöyry Infra** Espoo, Finland

Department Manager and Head of Business Development

- Established and managed a new business unit: Environmental Services
- Developed 4 sustainability training courses: Sustainability in Business, Environmental Management of Construction Projects, Environmental Reporting and Management Systems, Life Cycle Design
- 7 major sustainability design management projects for buildings
- 5 major environmental strategy and management system projects for ICT, banking and real estate companies and public sector organizations
- Development of a sustainability rating system (PromisE) for old and new buildings, commissioned by the Ministry of Environment

2002 - 2004 **Helsinki University of Technology**, Department of
Construction Economics and Management Helsinki, Finland

Senior Research Scientist

- Doctoral Dissertation
- Innovation, funding and management of research projects worth \$650K
- 13 academic papers, average grade of 4 (from 1 to 5) in scientific reviews
- 12 different research partners
- Instructor of 1 PhD and 2 master's students

1997 **Environmental Management and Law Association**,
USA based NGO in Hungary Budapest, Hungary

Visiting Researcher

- Pre-study of adapting the ISO 14000 environmental management system standard to Hungarian conditions

1996 **Ekonomikoulu Oy** Helsinki Finland

Teacher, Business Mathematics

- Developed and taught a new course preparing students for the admission test of The Helsinki School of Economics
- In all 120 students
- Scored 4,5 (5 max) in performance of teaching, highest of all teachers

1995 - 1998 **Helsinki University of Technology**, Department of
Construction Economics and Management Helsinki, Finland

Researcher

- Developed a LCA based design framework for buildings
- Taught courses on Conceptual design, Design management and Facility management

REFEREED JOURNAL ARTICLES

Junnila, S. (2005). Empirical Comparison of Process and Economic Input-Output Life Cycle Assessment in Service Industries. *Journal of Environmental Science and Technology*. *Submitted October 24, 2005*.

Junnila, S. (2005). Alternative Scenarios for Managing the Environmental Performance of a Service Sector Company. *Journal of Industrial Ecology*. *Accepted March 27, 2005*.

Junnila, S. (2004). The environmental significance of facilities in service sector companies. *Facilities* 2004 Vol. 22, Iss. 7/8, pp. 190-198. Emerald Group Publishing Limited.

Junnila, S. (2004). Life cycle assessment of environmentally significant aspects of an office building. *Nordic Journal of Surveying and Real Estate*

Research (NJSR) Special Series, Vol. 2.

Junnila, S., Horvath, A. & Guggemos, A. (2004). Life-cycle assessment of office buildings in Europe and the U.S. *Journal of Infrastructure Systems*. ASCE. *Accepted April 12, 2004.*

Junnila, S. & Horvath, A. (2003). Life cycle environmental effects of an office building. *Journal of Infrastructure Systems*, Vol. 9, Iss. 4, pp. 157-166. ASCE.

REFEREED CONFERENCE PAPERS

Nousiainen, M., Lehtonen, T. & Junnila, S. Increasing the value of facility management by environmental management service. Second International Conference - Clients Driving Innovation: Moving Ideas into Practice, 12-14 March 2006. *Accepted October 28, 2005.*

Junnila, S. & Nousiainen, M. (2005). Applying life cycle assessment to determine the environmental potential the existing facilities offer to the user organization. World Sustainable Building Conference SB05Tokyo. September 27-29, 2005.

Junnila, S. (2005). Implication of a Service System Approach in the Life Cycle Assessment of Buildings. Augusti, G., Shuëller, G.I. & Ciampoli, M. (eds.) 9th International Conference On Structural Safety And Reliability, June 19-23, 2005. Rome, Italy.

Nousiainen, M. & Junnila, S. (2005). The Growth of Environmental Requirements in International Facilities Management. In: Tulla, K.: Facilities Business and its Management, Combining Forces Advancing Facilities Management & Construction through Innovation Series. 11th CIB International Symposium, Combining Forces, Helsinki, June 13-16. Finland. VTT-Technical Research Centre of Finland, RIL-Association of Finnish Civil Engineers. pp. 560-572.

Junnila, S. (2005). Applying life cycle assessment to determine the environmentally significant activities of a service company. Korhonen, J. (ed.) 11th Annual International Sustainable Development Research Conference, June 6-8, 2005 Finlandia Hall, Helsinki, Finland.

Nousiainen, M. & Junnila, S. (2005). The Potential of Facility Management to Encourage Facility User's Environmental Work - a Case Study. In: The European Facility Management Conference 2005 Proceedings. Frankfurt, April 19-21. Berlin. VDE Verlag GMBH. pp. 553-563.

Junnila, S. & Nousiainen, M. (2004). The environmental contribution of an office building to the user organization's environmental impact. In Then, D., Jones, K. & Hinks, J. (eds.) Facilities Management and Maintenance, Human Elements in Facilities Management – Understanding the Needs of Our Customers. CIB W70 Symposium, December 7-8, 2004. Hong Kong 2004.

Nousiainen, M. & Junnila, S. (2004). Environmental management of facilities in service and light industries. In Bröchner, J. & Haugen, T.I. (eds.) The Third European Research Symposium in Facilities Management, Copenhagen, 12-14 May 2004. pp. 131-138.

Junnila, S. & Horvath, A. (2003). Environmental sensitivity analysis of the life cycle of an office building. In: Sarja A. (ed.) Proceedings of integrated lifetime engineering of buildings and civil infrastructures, ILCDES 2003. Kuopio, Finland. December 1-3, 2003. Association of Finnish Civil Engineers. pp. 215-220.

Junnila, S. (2003). Identification of environmental impact of office buildings by building element and material groups. In: Sarja, A. (ed.) Proceedings of integrated lifetime engineering of buildings and civil infrastructures, ILCDES 2003. Kuopio, Finland. December 1-3, 2003. Association of Finnish Civil Engineers. pp. 433-438.

Junnila, S. (2003). Estimating the environmental aspects of an office building's life cycle. In: Bontempi, F. (ed.) Proceedings of the second international conference on structural and construction engineering, ISEC-02. Rome, Italy. September 23-25, 2003. Lisse, the Netherlands. Balkema publisher. pp. 1685-1690.

Junnila, S. & Rintala, T. (2002). Comprehensive LCA reveals new critical aspects in offices. Sustainable Building 2002. International conference 23.-25. September. Oslo. Norway. CD-ROM.

TECHNICAL REPORTS

Junnila, S. (2005). Transforming sustainability costs to sustainability business in property management. The European Facility Management Conference 2006 Proceedings. Frankfurt, March 7-9.

Junnila, S. (2004). Comparative life cycle assessment of three office buildings. Saari A. (ed.) Helsinki University of Technology, Construction Economics and Management, A Research Reports, TKK-RTA-A1. Espoo, Finland. ISBN 951-22-7248-2. ISSN 1795-2700.

Junnila, S & Nousiainen, M. (2004). Environmental management of office premises (in Finnish). Helsinki University of Technology, Faculty of Civil and Environmental Engineering, Construction Economics and Management, Report No 225. Espoo. Finland. ISBN 951-22-7158-3. ISSN 1456-9329.

Nousiainen, M. & Junnila, S. (2004). Environmental objectives of companies operating in service and light industries (in Finnish). Helsinki University of Technology, Faculty of Civil and Environmental Engineering, Construction Economics and Management, Papers No 51. Espoo. Finland. ISBN 951-22-6907-4. ISSN 1456-8404.

Nousiainen, M., Junnila, S. & Puhto J. (2003). The facility management, a driver for improved environmental performance of premises (in Finnish). Helsinki University of Technology, Faculty of Civil and Environmental Engineering, Construction Economics and Management, Reports No. 220. Espoo. Finland. ISBN 951-22-6673-3. ISSN 1456-9329.

Vahala, K. & Junnila, S. (2002). Environmental service product package for real estate sector. Sustainable Building 2002. International conference 23.-25. September. Oslo. Norway. CD-ROM.

Junnila, S. (2001). Reuse and Recycling in Design for Environment (in Finnish). *In* Integrated Life Cycle Design. RIL 216-2001. Association of

Finnish Civil Engineers. ISBN 951-758-414-8. ISSN 0356-9401

Junnila, S. & Saari, A. (1998). Environmental Burdens of a Finnish Apartment Building by Building Elements in the Context of LCA (in Finnish). Helsinki University of Technology. Faculty of Civil and Environmental Engineering. Construction Economics and Management. Report 167. ISBN 951-22-4075-0. ISSN 1455-5913.

Junnila, S. & Saari, A. (1997). Material and Energy Flow Estimation for Building Elements in the Context of LCA (in Finnish). Helsinki University of Technology. Faculty of Civil and Environmental Engineering. Construction Economics and Management. Report 150. ISBN 951-22-3652-4. ISSN 0784-221X.

DISSERTATIONS

Junnila, S. (2004). The environmental impact of an office building throughout its life cycle (Doctoral Dissertation). Helsinki University of Technology, Construction Economics and Management, A Research Reports, Espoo, Finland.

Junnila, S. (1998). Quantitative estimation of environmental burdens of a Finnish apartments building, (Licentiate Theses). Helsinki University of Technology, Faculty of Civil and Environmental Engineering, Construction Economics and Management.

Junnila, S. (1994) The indicators for selecting a cost effective production method for wood structured apartment houses, (Master's Theses). Helsinki University of Technology, Faculty of Civil and Environmental Engineering, Structural Engineering and Building Physics..

LANGUAGES

Mother tongue is Finnish
Excellent command of English
Good command of German
Good command of Swedish
Basic knowledge of French

DESIGN AND CONSULTANCY ASSIGNMENTS

Design work:

- 2001 Environmental management systems, Nokia Real Estate
- 2001 Environmental management systems, HUS-Kiinteistöt Oy
- 2001 Wiklund department store, environmental targets of renovation project, SOK Facilities
- 2001 HTC Porkkalantalo office building, Life cycle design of a new construction, Kapiteeli Ltd
- 2000 Development of environmental rating system PromisE for buildings, Ministry of Environment

- 2000 Development of environmental auditing systems for service suppliers, Kesko Ltd
- 2000 Life cycle control and life cycle assessment of a head office building, Nokia Ltd
- 2000 Commercial center Iso-Omena, life cycle design, Aleksia Ltd
- 1999 Leija-environmental center, environmental targets and profile, Vantaanportti Oy
- 1999 Commercial center CM- Lielähti environmental consultancy, rating and auditing, Kesko Ltd
- 1999 Finnish Parliament, architectural competition of extension of parliament building, environmental assessment
- 1999 Unionikatu 25, ecological targets of renovation project, HKR
- 1999 Day-care center Merituuli, environmental design, HKR
- 1998 Environmental profiles of Kontula and Kallahti day-care centers, HKR
- 1998 Environmental profile of HKR Real Estate,

Consultancy:

- 2004 User-Electricity Management, Nordea Ltd
- 2004 Corporate Sustainability Strategy, Oventia Ltd
- 2002 Corporate Social Responsibility report, Kesko Ltd
- 2000 Office development project, Environmental strategy, Kapiteeli Ltd
- 2000 Environmental training, Polar Ltd
- 2000 Development of environmental criteria for purchasing electricity for facilities, Kesko Ltd
- 2000 Environmental strategy, Polar Ltd
- 2000 Sustainable Building Rating, GBTool, Finnish localization, RAKLI
- 2000 Environmental influence of electricity purchasing, Kestra Oy
- 2000 Commercial center Iso-Omena, environmental consultancy, Aleksia Ltd
- 2000 Environmental audit of hospitals, HYKS-kiinteistöt Oy
- 2000 Environmental audit of real estate facilities, Aleksia Oy
- 2000 Environmental aspect definition of stake holders, Aleksia Oy
- 2000 External environmental costs of real estate sector, Ministry of

Environment

- 1999 Environmental strategy for real estates, Kesko Ltd
- 1999 Guidelines for life cycle design of buildings, RIL, Association of Finnish Civil Engineers

PROFESSIONAL MEMBERSHIPS

Consortium on Green Design and Manufacturing at UC Berkeley, California, USA

Member of Finnish National Board in the Conference Sustainable Building.