

Sustainability in the Information Society (SIS)



To achieve more added value with less material and energy use is a necessary condition for sustainable development. This goal is closely related to Information and Communication Technologies (ICT), because information is very often the key to decreasing the resource intensity of processes and products.

«Sustainability in the Information Society» (SIS) is an innovation and cooperation programme funded by the Council of the Swiss Federal Institutes of Technology. It is being carried out by the Swiss Federal Laboratories for Materials Testing and Research (EMPA). The aims of this programme are:

- To assess the opportunities and risks of Information Technology (IT) with respect to sustainable development.
- To analyse the relationship between material and information flows in society and to develop methods and tools that support this analysis.
- To design and implement IT applications that help to approach the goal of sustainable development, e.g. to dematerialise product or service life cycles.



Selected Projects of the SIS Programme

Environmental impact of electronic media compared to print media

(3/1999 - 1/2001, EMPA Report 253)

A dynamic model for the assessment of plastics waste disposal options in the Swiss waste management system

(7/1997 - 2/2000, EMPA Report 249)

Ecolnvent 2000 - Integration of Swissecoinventories into a homogenous national database

(11/2000 - 12/2002)

Optimisation strategies for transportation systems using mobile tele-communications

(12/2000 - 5/2001)

Development of a methodology for integrated material and information flow analysis

(7/2001 - 6/2002).

Functional units and alternative reference quantities for LCAs in the field of IT

(10/2001 - 3/2002)

The influence of Moore's Law on the labour and resource productivity of PC workplaces

(4/2002 - 12/2002)

Recent Publications

Hilty, L. M., Gilgen, P. W. (eds.) (2001)
Sustainability in the Information Society.
Proceedings of the 15th International Symposium
Informatics for Environmental Protection, Zurich,
October 10-12, 2001. Marburg: Metropolis

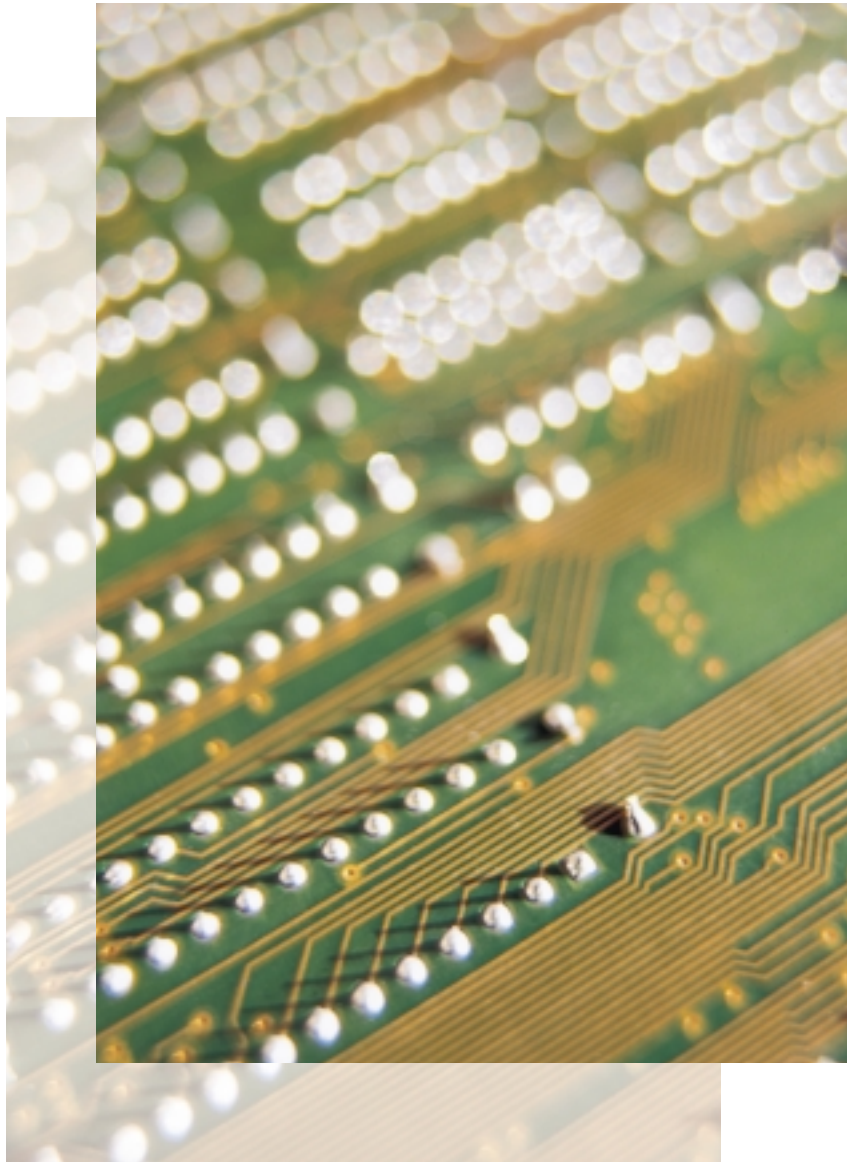
Hilty, L. M., Ruddy, T. F. (2000)
Towards a Sustainable Information Society.
Informatik/Informatique, 4/2000, pp. 2-7

Hischier, R., Reichart, I. (2001)
Environmental Impact: A Comparison between
print and electronic media. Proceedings of the 3rd
EcoPaperTech Conference, June 4 - 8, 2001,
Helsinki, pp. 397 - 406

Wäger, P., Gilgen, P.W., Widmer, H. (2001)
A Dynamic Model for the Assessment of Plastics
Waste Disposal Options in Swiss Waste
Management System. In: Proceedings of the
Workshop 'System Studies for Integrated Waste
Management', April 2-3, 2001, Stockholm

Wäger, P., Gilgen, P.W., Widmer, H. (2000)
A Dynamic Model for Decision-Making in Plastics
Waste Management. Proceedings of R'2000,
5-9. June, Toronto, Canada

Zurkirch, M., Reichart, I. (2001)
Environmental Impact of Telecommunication
Services – An evaluation by Means of Life-Cycle
Assessment. In: Park J., Roome N. (Hrsg.). Ecology
of the New Economy – Sustainable Transformation
of Global Information, Communication, and
Electronics Industries. Greenleaf Publishing,
Sheffield, 2001



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