



FINLAND FUTURES  
RESEARCH CENTRE

ANNUAL REPORT 2004



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## **MATERIALS**

Cover: Curious Metallics Metal 250 g/m<sup>2</sup>

Pages: MultiOffset 140 g/m<sup>2</sup>

## **PRINTING**

Esa Print Oy

## **PHOTOGRAPHS**

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Sami Mannerheimo, Annika Sabell, Katja Vilponiemi

**ISBN 951-564-289-2**

# DIRECTOR'S REVIEW



The Finland Futures Research Centre played a more active role than usual in 2004, both on the international and domestic fronts. During the year our research and educational activities grew and strengthened. Our three offices – Turku, Tampere and Helsinki – solidified their status and found new partners and clients. In all we have developed or advanced more than ten major international research projects during 2004. The focus of our research was set more firmly on foresight and its methodologies, visionary leadership, environmental and cultural research, and, lest we forget, our ever extending educational activities.

This vibrant year saw the organisation of three significant international events. Firstly, the Centre's annual conference was held in Tampere during June. It was called "Towards Sustainable Futures – Tools and Strategies". Secondly, the Annual Conference of the Club of Rome "Limits to Ignorance: The Challenge of Informed Humanity" was held in Helsinki on October. Lastly, the international seminar "Exystence – Complexity Meets Business", also in Helsinki, was held in November. These successful events brought together over 400 researchers and representatives from the private and public sectors, including the President of Finland, Tarja Halonen.

The most rewarding development during the year was to see co-operation with organisations such as the Academy of Finland, the Finnish National Fund for Research and Development (Sitra) and the National Technology Agency of Finland (Tekes) grow closer and deeper. The project "Eco-efficiency now and in the Future - comparative studies on state, sector and product levels" funded by Tekes was launched and is expected to produce interesting and concrete results about on how eco-efficiency, correctly understood, significantly supports strategic development processes within companies and organisations. The book "Towards a Creative Economy" (published in Finnish by Edita) was produced as part of the project "Cultural competence as a component of national competitiveness" and is now Sitra's best-selling book.

That successful co-operation and those interesting results were duplicated by many other projects. The "Culture as a Resource of the Countryside" project created a concept and a concrete tool for developing the countryside and its maintaining vitality with the help of culture. For the project "Future and Security: Scanning the Changing Environment of the Police" the Centre is creating a forecasting program for the police. The program will aid the development of society's security environment. New perspectives for regional development were found in the "Value Based Entrepreneurship" project, in which municipalities were clustered based on their common goals and values. New methods for giving entrepreneurs a boost, were developed in the project "New Perspectives for Entrepreneurship in the Year 2020". These are only a few of the projects mentioned. In total we carried out nearly 70 different projects, which covered areas such as foresight, visionary leadership, risk management, strategic management, sustainable development and rural development etc.

Hundreds of university students again studied through the Finland Futures Academy. The Centre also began to prepare the country's first and only and the world's second Master's Programme in Futures Studies, in co-op-

eration with the other departments of the Turku School of Economics and Business Administration (TSEBA). The Centre is becoming ever more closely integrated into TSEBA's everyday activities. Our continuing education concept has also developed strongly and is evidently one of our major growth areas in the future.

The Centre's turnover grew to nearly two million euros. We employed more than 40 people till the end of the year and totalled 35 personnel years. Our financial surplus was reasonable and provides a good base for developing activities. According to nearly all indicators our activities proceeded very positively.

In all the year 2004 was filled with energy and new opportunities. I would like to warmly thank all the personnel, as well as numerous partners and clients for creating a successful year. We are growing into one of the major actors in the field nationally and internationally. We are committed to creating a sustainable future and we are continuing our efforts to be an ever better producer and distributor of futures knowledge. The groundwork for this has been excellent.



Markku Wilenius  
Director

# FINLAND FUTURES RESEARCH CENTRE IN A NUTSHELL

**F**inland Futures Research Centre produces and develops visionary knowledge about alternative futures and the related challenges and opportunities for the use of policy making. Our clients include public bodies and private enterprises, especially experts and people in demanding managerial positions. The Centre provides well-researched futures-oriented information in an interesting format for both domestic and international markets.

## *Finland Futures Research Centre concentrates on*

### Academic Basic Research

- Developing the scientific foundation and methods in futures research
- Research on social transformations
- Developing indicator methods
- Creating models for sustainable development
- Research in energy, climate and biodiversity

### Applied Research

- Developing foresight techniques
- Research in culture and cultural competence
- The future of work and entrepreneurship

- Connections between information society and sustainable development

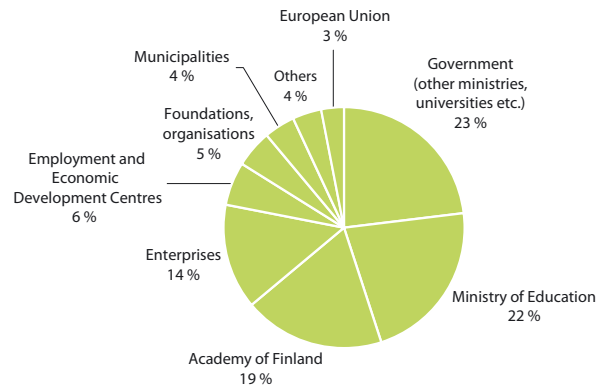
### Development and Consultation

- Competence foresight and organisational strategic development
- Visionary leadership
- Visionary, scenario and future workshops
- Regional and local foresight and development

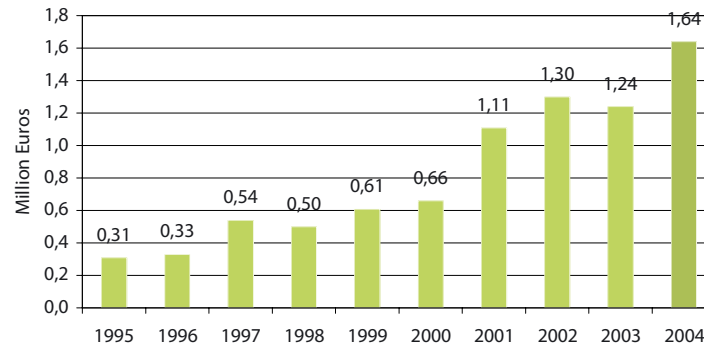
### Futures Training

- Undergraduate courses in futures studies
- Masters Degree programme in futures studies at Turku School of Economics and Business Administration (launch in 2005)
- National postgraduate programme in futures studies
- Tailored training modules for organisations and businesses
- Development of future learning environments
- Seminars and international conferences

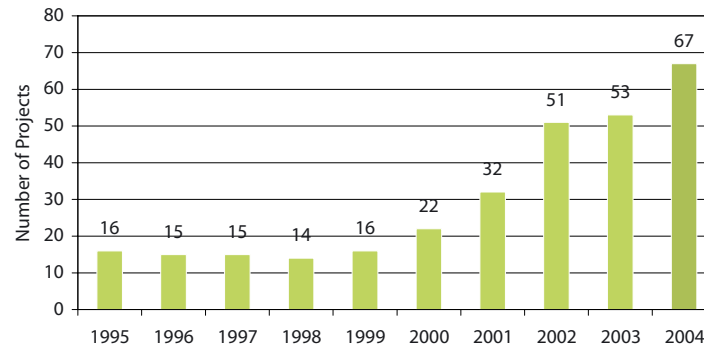
## TURNOVER BREAKDOWN 2004



## TURNOVER 1995-2004



## PROJECTS 1995-2004



# RESEARCH ACTIVITIES

The Centre relies on a cross-disciplinary expert community with a wide range of competencies. Our clients include the Directorates-General of the European Union and the European Foundation, seven ministries in Finland, the Finnish National Fund for Research and Development (Sitra), the National Technology Agency of Finland (Tekes), the Academy of Finland, the largest Finnish trade unions, municipalities and numerous businesses and corporations.

During 2004 we carried out nearly 70 research projects. The major projects and the sources of funding are listed below. More detailed information about them can be obtained from our website.

## FORESIGHT RESEARCH

### ***SPIDER - Increasing Regional Competitiveness through Futures Research Methods***

*2004–2006, European Union's 'Regions of Knowledge' Pilot Action program*

### ***COST A22 - European Network for Foresight Methodology***

*2003–2006, COST - European Cooperation in the field of Scientific and Technical Research"*

### ***Education Intelligence***

*2003–2005, The Confederation of Finnish Industries EK*

### ***Information Society Vision 2010 for the City of Lahti***

*2004, Lahti Science and Business Park Ltd*

### ***Towards Regional Foresight (Luotain)***

*2002–2004, The Joint Authority of Education in Rovaniemi*

### ***The Millennium Project Node in Finland***

*2003-, American Council for the UN University*

### ***The Vision Process of the National Software Business Cluster***

*2004–2005, Technopolis Ventures Ltd*

### ***Satakunta Foresight***

*2004–2006, Employment and Economic Development Centre for Satakunta*

### ***Developing Content for the Foresight Project's Internet Portal Ensti***

*2003–2004, Finnish National Board of Education*

### ***Foresight Project for the Ministry of Social Affairs and Health***

*2004–2005, Ministry of Social Affairs and Health*

### ***Future and Security: Scanning the Changing Environment of the Police***

*2003–2005, Provincial Police Command of Western Finland*

### ***Information Society Model for Western Finland***

*2004–2005, Regional Council of Southwest Finland, Citizen's Information Society Programme – ihmisen@turku, ICT Turku Ltd, Turku Area Development TAD Centre*



President Tarja Halonen visited the stand of the Finnish universities during the last World Summit on the Information Society.

## CULTURAL RESEARCH

### ***Arts & Business Forum Finland - Prereport***

*2004, The Finnish National Fund for Research and Development (Sitra) and Nordisk Innovations Center*

### ***Culture as a Resource of the Countryside (Kulma)***

*2003–2005, European Agricultural Guidance and Guarantee Fund (EMOTR), The Finnish Cultural Foundation fund for Western Finland and its municipalities*



Culture as a Resource of the Countryside (KULMA) project brought together people from the Finnish cultural sector.

### ***Cultural Competence as a Component of National Competitiveness (Kulta)***

*2002–2004, The Finnish National Fund for Research and Development (Sitra)*

### ***Cultural Changes in the Neighbourhood in the Finnish Countryside***

*2003–2006, e.g. Emil Aaltonen Foundation and Ministry of Agriculture and Forestry*

## VISIONARY LEADERSHIP

### ***The Gulf of Finland Connection***

2004–2005, Kotka-Hamina Region of Finland Ltd (European Social Fund)

### ***Futures Forum on Spatial Structure and Land Use***

2004, Ministry of the Environment

### ***Value Based Entrepreneurship and Trade Promotion in Districts and Regions***

2003–2004, Kunnallisalan kehittämissäätiö (KAKS)

### ***TUKES Future***

2004, Finland's Safety Technology Authority (TUKES)

### ***New Perspectives for Entrepreneurship in the Year 2020***

2000–2004, mainly funded by the Turku Area Development TAD Centre

## ENVIRONMENTAL RESEARCH

### ***Expert Models of Forest Biodiversity (Fibre)***

2000–2005, Academy of Finland

### ***Digital Balance between Industrialized and Developing Countries - a Case Study: the Development of an Information Society on the Continent of Africa***

2003–2005, Academy of Finland

### ***Eco-efficiency Now and in the Future - Comparative Studies on State, Sector and Product Levels***

2003–2004, The National Technology Agency (Tekes)

### ***Megatrends and the Challenges of Waste Management in Europe, Streams***

2004–2005, Engineering Office Paavo Ristola Ltd

### ***Climate Policy in Developing Countries - Efficiency and Institutional Performance***

2003–2004, Academy of Finland

### ***The Collision of Nature and Culture in Transport Policy, TRAPO***

2001–2004, Academy of Finland

### ***The Property of CO<sub>2</sub> Emissions from Fuel Combustion and the Estimation of Decarbonization Throughout the World from 1971 to 2000***

2004, Kone Foundation

### ***Social Structure in the Information Age (TERRA2000)***

2002–2004, Academy of Finland

### ***Future of Finnish Agriculture, Susagfu***

2001–2004, Academy of Finland (The Centre's funding from the Finnish Environmental Institute)

### ***Sustainable Energy Development in Developing Countries, SEDCO***

2002–2004, The Academy of Finland

### ***Sustainability Strategy Network***

European Union

### ***Combining Russian Energy and Climate Policies - Meeting Energy Efficiency Goals by Applying Climate Policy Instruments***

2004–2006, Academy of Finland

# FUTURES EDUCATION



**F**inland Futures Research Centre plans and implements futures studies courses for undergraduate and postgraduate studies, as well as further education and development processes for companies and other organisations.

## ACADEMIC EDUCATION

The Finland Futures Academy (FFA) is a national education and research network in the field of futures studies

for universities. The network is co-ordinated by the Centre and it has 17 member universities. Futures studies education includes modules of intensive training, as well as distance learning. Studies taken in the FFA can be included in a degree either under futures studies or integrated with grades from other subjects. Every academic year, students are offered a study module extending, with special courses included, to app. 45 ECTS credits at most. During 2004 about 450 students took part in the under- and postgraduate courses.

During the year the Centre and the FFA began to prepare the country's first and only the world's second Master's Programme in Futures Studies, in co-operation with two other departments of the Turku School of Economics and Business Administration (Economic Geography and Economic Sociology). The programme will begin in August 2005 and lasts for a two-year study period. The final degree for the course will be awarded as a Master of Science in Economics and Business Administration.

In addition to the domestic courses, a part of the FFA's courses are organised through international co-operation. The FFA is currently adopting new forms of activity within the international futures studies arena.

Plus, it also has an International Advisory Board (IAB), which functions as an advisory organ for the FFA and its international development. International activity is also focussed on active participation within international research and development projects. The most important of the FFA's research projects is its functioning as a node in the Millennium Project of the American Council for the United Nations University. The FFA is also a coordinator of a SPIDER Project, which is a regional development project, partly funded by the EU Commission.



From the IAB meeting on 10 October 2004 in Suomenlinna, Helsinki. At the back from the left: Osmo Kuusi, Jerome Glenn, Michael Keenan and Mati Heidmets. In front from the left: Karlheinz Steinmüller (Chairman), Erzsébet Nováky, Pentti Malaska and Eleonora Barbieri Masini.

## TRAINING AND DEVELOPMENT SERVICES – FUTURES FOCUS

The concept for the Futures Focus training and development services was created and piloted during the autumn of 2004. The strategy for the supply of services, marketing and production were examined by the FFA together with several experts from the field of human resource development within the Futures Research Centre, as well as with potential clients. The work done during 2004 laid the basis for the more detailed and concrete steps to be taken during 2005.



Futures studies tutors Réka Várnagy from Hungary and Krista Loogma from Estonia joined the tutors meeting in September 2004 in Tallinn, Estonia.

## EDUCATION AND TRAINING PROJECTS IN 2004

*Abstract Database of Futures Research – Futurum*  
[www.tukkk.fi/tutu/futurumsophia](http://www.tukkk.fi/tutu/futurumsophia)

*Corporate University*  
2004, Levón Institute at University of Vaasa

*Finland Futures Academy*  
1998-, Ministry of Education

*From Knowledge to Know-how: The Images of the Future in Education*  
2003–2004, Academy of Finland

*Futures Research Study Materials – TOPI Portal*  
[www.tukkk.fi/tutu/topi](http://www.tukkk.fi/tutu/topi)

# INTERNATIONAL SEMINARS AND CONFERENCES

The Finland Futures Research Centre relies on a cross-disciplinary expert community with a wide range of competence. We are a member of many international expert networks, including the Club of Rome, the Millennium Project, World Futures Studies Federation (WFSF) and World Futures Society (WFS).

The international workshops and conferences organised annually by the Centre bring together major actors and experts from futures research and other interested parties. Successful events during 2004 brought together over 400 researchers and representatives from the private and public sectors, including the President of Finland, Tarja Halonen.

The Centre's annual conference was held in June in Tampere and called "Towards Sustainable Futures – Tools and Strategies". The international seminar "Exystence – Complexity Meets Business" was held in November in Helsinki.

The Annual Conference 2004 of the Club of Rome was held in Helsinki on 10-12 October. The internal meeting of the Club of Rome, held in Suomenlinna on 10 October was followed by a two-day conference entitled "Limits to Ignorance: The Challenge of Informed Humanity".

Nearly one hundred foreign participants - members of the Club of Rome and representatives of national chapters - from 36 countries and five continents, as well as some eighty Finnish participants representing academic community, business, NGOs and public administration were gathered together to discuss the problems of ignorance in today's globalised world.



Exystence seminar brought together experts in futures research and complexity research. At the back from the left Mika Aaltonen, Theodor Barth, John L. Casti and Markku Wilenius. In the front from the left Eve Mittleton-Kelly and Auli Keskinen.



Rector Ilkka Niiniluoto, Professor Markku Wilenius and His Royal Highness Prince El Hassan bin Talal welcome the President of Finland, Tarja Halonen to the Club of Rome conference.



President Martti Ahtisaari thanks the Club of Rome for its constant courage in raising complex questions and turning them into public discussions.



In her presentation President Halonen accentuated that the cornerstone of a fairer globalization lies in meeting the demands of the people.

# ADMINISTRATION AND PERSONNEL

The Centre was established in 1992 as an auxiliary unit of the Turku School of Economics and Business Administration. Nowadays the Centre has offices in Turku, Helsinki and Tampere. In all, the Centre employs more than 40 people.

The offices in Tampere and Helsinki began their year 2004 by moving into new facilities. Activities within the offices are headed by regional managers. The regional manager in Turku is Olli Hietanen, in Helsinki, Mika Aaltonen and in Tampere, Jyrki Luukkanen.



The Centre held its strategy workshop on 8-9 March 2004 in Havulinna, Noormarkku.

## PERSONNEL IN 2004

Aalto Hanna-Kaisa, Education Coordinator  
Aaltonen Mika, Development Director  
Ahokas Ira, Researcher  
Arvonen Anne, Project Coordinator  
Borg Riikka, Trainee  
Hakola Paula, Researcher  
Heikkilä Juha, Research Assistant  
Hietanen Olli, Regional Manager  
Ilvonen Jenni, Researcher  
Jokinen Leena, Education Coordinator  
Kaisjoki Jussi, Trainee  
Kaivo-oja Jari, Research Manager  
Kaskinen Juha, Coordinator (International Affairs)  
Kinnunen Miia, Research Assistant  
Kinnunen Venla, Research Assistant  
Kirveenummi Anna, Researcher  
Kohl Johanna, Researcher  
Kojola Johanna, Communications Manager  
Korvela Marko, Trainee  
Koskenranta Reetta, Research Assistant  
Kuntsi-Reunanen Eeva, Researcher  
Kuosa Tuomo, Researcher  
Laurén Leena-Maija, Development Manager  
Lautamäki Janne, Research Assistant

Lauttamäki Ville, Researcher  
 Lehtonen Miika, Conscientious Objector  
 Luukkanen Jyrki, Senior Researcher  
 Neuvonen Aleks, Researcher  
 Niemi Erika, Research Assistant  
 Nurmi Timo, Project Manager  
 Pennanen Alex, Conscientious Objector  
 Poikkeus Noora, Trainee  
 Pyykkö Pia, Trainee  
 Rautkylä-Willey Ritva, Researcher  
 Roima Paula, Trainee  
 Rosti Päivi, Researcher  
 Rubin Anita, Senior Researcher (Vice Director)  
 Saarimaa Riikka, Researcher  
 Salonen Sofi, Trainee  
 Saloranta Pauli, Project Coordinator  
 Siivonen Katriina, Project Manager  
 Sulanne Timo, Research Assistant  
 Sun JiWu, Senior Researcher  
 Suvanto Minna, Trainee  
 Söderlund Sari, Coordinator  
 Tapio Petri, Senior Researcher  
 Vaittinen Virpi, Researcher  
 Vehmas Jarmo, Senior Researcher  
 Vihermaa Kirsi-Mari, Secretary  
 Viheraari Raija, Project Assistant  
 Wilenius Markku, Director  
 Vilola Anne-Mari, Project Assistant  
 Vilponiemi Katja, Project Assistant  
 Vinnari Markus, Researcher

Scientific experts:

Kamppinen Matti, Dr.  
 Kuusi Osmo, Dr.  
 Malaska Pentti, Dr, Professor Emeritus

## EXECUTIVE BOARD

The Executive Board together with the director is responsible for the strategy and development work as the main decision making body of the Finland Futures Research Centre.

- Wilenius Markku, Director
- Aaltonen Mika, Development Director
- Hietanen Olli, Regional Manager
- Kaivo-oja Jari, Research Manager
- Kaskinen Juha, Coordinator (International Affairs)
- Luukkanen Jyrki, Senior Researcher
- Rubin Anita, Senior Researcher (Vice Director)
- Söderlund Sari, Coordinator



Research Manager Jari Kaivo-oja had his doctoral dissertation in October at the University of Tampere. Dr. Kaivo-oja has been working in the Centre since 1995 and is a member of the Executive Board.

# PUBLICATIONS IN 2004

The personnel of the Finland Futures Research Centre actively publish in journals and books about futures studies and in other scientific journals. The Centre also produces its own FFRC publication series, in which approximately 5-10 articles, reports or other scientific texts are published every year.

## SOME OF OUR PUBLICATIONS IN 2004

*For a more detailed list see our website.*

Kaivo-oja, Jari (2004) *Analyses of Historical and Future Problems of Sustainable Development: Research Articles in Spatial Sustainability Analysis, Planning and Evaluation*. Acta Universitatis Tamperensis 1038, University of Tampere, Tampere. PhD Dissertation. Acta Electronica Universitatis Tamperensis 385. 434 p.

Kaivo-oja, Jari & Luukkanen, Jyrki & Wilenius, Markku (2004) *Defining Alternative National Socio-economic and Technological Futures up to 2100: SRES Scenarios for the Case of Finland*. Boreal Environmental Research 9, May 2004, p. 109-125.

Kaivo-oja, Jari & Luukkanen, Jyrki (2004) The European Union balancing between CO<sub>2</sub> reduction commitments and growth policies. *Energy Policy*. Vol. 32 (2004) p. 1511-1530.

Kaivo-oja, Jari & Seppälä, Osmo & Katko, Tapio (2004) Seeking for Convergence between History and Futures Research. *Futures. The Journal of Forecasting, Planning and Policy*. Vol. 36, Issue 5, p. 527-547.

Kaivo-oja, Jari & Katko, Tapio S. & Seppälä, Osmo M. (2004) Seeking for Convergence between History and Futures Research. In Juuti, Petri S. & Katko, Tapio S. (eds.) *From a Few to All. Long-term Development of Water and Environmental Services in Finland*. RT-Print Oy, Pieksämäki, p. 151-172.

Kaskinen, Juha (2004) The Role of Environmental Scanning in Developing Regional Innovation System. In Potucek, Martin & Novacek, Pavel & Slintakova, Barbora (eds.) *The First Prague Workshop on Futures Studies Methodology-CESES Papers, Methodology*. 11/2004. p. 76-84.

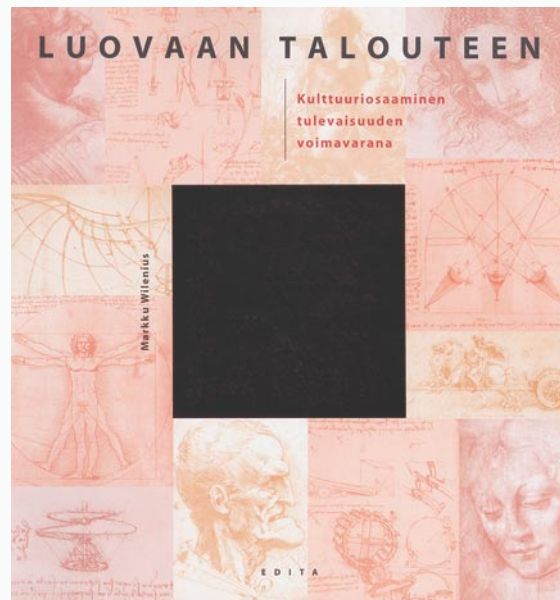
Kuosa, Tuomo (2004) Changes both in functional environment and in the needs of people create new product concepts. *Labour market trends Survey, Economic Trends* 3/2004. p. 24-27.

Mendonça, S. & Cunha, M.P. & Kaivo-oja, J. & Ruff, F. (2004) Wild Cards, Weak Signals and Organisational Improvisation, *Futures. The Journal of Forecasting, Planning and Policy*. Vol. 36, Issue 2, p. 201-218.

Sun, JiWu (2004) The analysis of energy-related CO<sub>2</sub> emissions from 1950 to 2000. *International Journal of Global Energy Issues*. Volume 21, Number 4 (2004), p. 397-405.

Sun, JiWu (2004) The Impact of Changing Energy Mix on CO<sub>2</sub> Emissions – a Case from CO<sub>2</sub> Emissions in the OECD, 1971-2000. *Energy Sources*, 26(10). p. 915-926.

Sun, JiWu & Kuntsi, Eeva (2004) Environmental Impact of Energy use in Bangladesh, India, Pakistan and Thailand. *Global Environmental Change*. Vol. 14, Issue 2 (July 2004). p. 161-169.



Wilenius, Markku (2004) *Luovaan talouteen. Kulttuuriosaaminen tulevaisuuden voimavarana*. Sitra 266. Edita Publishing Oy, Helsinki. 250 p. (*Towards a Creative Economy. Cultural Competence as a Future Resource*)



## FINLAND FUTURES RESEARCH CENTRE

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