

SERI Annual Reports



# ANNUAL REPORT 2006

# Foreword

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Global change and its impact on human beings is widely discussed at the moment. Newspapers report on climate change, numerous TV broadcasts deal with the topic and Al Gore's "An inconvenient truth" tops the most widely seen documentary films. The concept of Sustainable Development finally seems to reach the broader public.

In 2006, SERI has continued to do research on sustainability, but also concentrated on the dissemination of the results to stakeholders and the public. The most prominent example of the latter efforts is the SERI-book "Was verträgt unsere Erde noch? Wege in die Nachhaltigkeit. (How much more can our earth take? Paths to sustainability.)" written by Jill Jäger in cooperation with several SERI researchers. In 2006 SERI also launched its new website – informing not only about our scientific research projects, but also highlighting main topics of interest for sustainability.

The SERI society ("Verein zur Förderung eines Sustainable Europe Research Institute"), Vienna confirmed its board. At the beginning of 2006 the "Sustainable Europe Research Institute Germany e.V." was founded. At its Annual Meeting the SERI Germany e.V. welcomed several new members. First projects are on the way now. Head of the Board are Sylvia Lorek and her deputy Joachim Spangenberg.

The SERI Nachhaltigkeitsforschungs und -kommunikations GmbH" (SERI sustainability research and communication, Ltd.) operated very successfully in 2006. An envisioning process was started, inviting all employees to think about the company's future with a horizon until 2011. The aim was to find ways to unite the aim of economic success with personally happy lives of its employees and projects that bring the world forward on its way to sustainability.

The SERI Annual report gives you an overview of the activities of SERI in 2006. We have tried to make it as concise, but also as informative, as possible. If you want to go into further detail on any subject, please refer to our website – the relevant links are indicated.

Of course, you are also welcome to contact us personally, in case you want to know more about us and our work. If you happen to be in Vienna, please give us a call and/or visit us. We would be happy to welcome you!



Dr. Friedrich Hinterberger

President, Verein zur Förderung eines Sustainable Europe Research Institute

Vienna, March 2007

# Mission Statement

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## What we do:

The Sustainable Europe Research Institute (SERI) is a Pan-European think tank exploring sustainable development options for European societies. It was set up in September 1999.

Sustainability strategies must be integrated or they are not sustainable. SERI therefore aims at a comprehensive view of sustainability both empirically and in its policy recommendations.

## Comprehensive means:

SERI integrates the ecological objective to reduce environmental space use with elaborated economic, social and institutional sustainability strategies;

SERI develops strategies on the macro, meso, micro and meta levels of economies/societies;

SERI looks at the impact of activities and policies in Europe on other parts of the world;

SERI's work is based on methodological pluralism.

On the other hand we are far from working on everything important in the field of sustainable development. While integrating ecological, social, economic and institutional dimensions, SERI focuses the notion of environmental space (in terms of resources, energy and land-use) and the measurability of social and economic dimensions of SD. Indicator-based policies are therefore important for our recommendations.

## How we do it:

SERI is a virtual internet-based institute. From our pool of staff and members comprising a broad spectrum of qualifications we can select appropriate teams for each project.

The research carried out by members of SERI supports the dialogue on sustainable development within European civil society. It specifically aims to further develop the exchange of ideas between environmental organisations, governments, trade unions and industry. SERI member offices are in Vienna, Austria, Cologne and Overath, both Germany. The affiliated academics and researchers live throughout Europe. The policy dialogue that SERI aims to engender is supported by a webpage, conferences, meetings and publications

## The Sustainable Europe Research Institute

investigates environmental, economic, social and institutional conditions for sustainable development

develops and disseminates information on through-put limits and makes possible steps towards sustainability apparent

develops scientifically accurate and practical policy solutions which allow sustainable development to become a reality in Europe (and beyond). SERI addresses all relevant agents: businesses, households, civil society agents, administrators and politicians.

SERI's work is structured along the four dimensions of sustainable development: environmental, social, economic and institutional. Together with our work on improving methodology and a group of cross-cutting themes, this makes up the general framework, within which we deal with the more specific themes.

# Contents

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Foreword.....	2
Mission Statement.....	3
Highlights.....	5
Projects.....	6
<i>New projects</i> .....	6
<i>Ongoing projects</i> .....	10
<i>Finished projects</i> .....	14
<i>Upcoming projects</i> .....	18
Cooperation.....	21
Events.....	23
Communication and Teaching.....	28
SERI @ the media.....	29
Publications.....	30
<i>SERI Studies</i> .....	30
<i>SERI Background Papers</i> .....	30
<i>The SERI Book</i> .....	32
<i>Books and book sections</i> .....	33
<i>Journal articles</i> .....	35
<i>Other articles and publications</i> .....	36
<i>Films</i> .....	37
Presentations at workshops and conferences.....	38
Personalalia.....	41

# Highlights ([www.seri.at/highlights](http://www.seri.at/highlights))

Highlights are topics that are in our opinion of major interest and that we want to communicate to the broad public. They are published at irregular intervals on our website and in the SERI newsletter.

## Searching for Happiness

Sustainable development is still a neglected issue in our societies. One reason might be that people find it hard to relate sustainable development to their own lives. What does sustainability have to do with me? We argue that happiness or well-being of all people can serve as an overarching aim of sustainable development, thus bringing the goals of sustainable development closer to the everyday concerns of individuals. For more information please go to [www.seri.at/happiness](http://www.seri.at/happiness).



## Global natural resources consumption



World-wide consumption of natural resources such as oil, coal, metals, construction materials and products from agriculture and forestry increases year by year. The annual quantity of resources extracted from global ecosystems rose from 40 to 53 billion tons between 1980 and 2002 – an increase of one third within only 22 years. In comparison to 1980, 25% less natural resources are required today to produce one unit of economic value. However, since the world economy grew by 82 % between 1980 and 2002, these efficiency gains were more than overcompensated. And scenarios of future developments show that consumption will continue to rise, if no political actions are taken to slow down this trend (up to an estimated 80 billion tons in the year 2020). For more information, please visit [www.seri.at/global\\_resource\\_use](http://www.seri.at/global_resource_use).

## The Ecological Footprint

In various projects, SERI is applying the concept of the Ecological Footprint. SERI is scientific partner of environmental NGOs (Greenpeace, WWF, Friends of the Earth) on the calculation of the Ecological Footprint and on the elaboration of options to reduce it. We provided scientific input for various "Footprint calculators" and a Footprint computer game. We also provide scientific evaluations of the indicator Ecological Footprint in comparison to other methods, such as Material Flow Analysis. For more information visit [www.seri.at/footprint](http://www.seri.at/footprint).



## Economic growth: yes or no?



Does economic growth solve or cause current problems (like unemployment, rising poverty, resource consumption and environmental degradation)? We have to deal with this question, if we call for an absolute decrease of global resource consumption, since we continue to use more and more resources and energy, although we use them more and more efficiently. Thus, the question about the reasonability of economic growth is still on the agenda more than 30 years after the publication of the "limits to growth". For more information visit <http://www.seri.at/growth>.

## Climate Change

Climate change is held to be the largest environmental challenge of the future, as is shown currently by the daily reports in the media. Are the observed phenomena, such as temperature increase and extreme weather events, a result of natural variability? What measures are necessary in order to avoid dramatic levels of climate change? For more information visit <http://seri.at/klimawandel>.



## Projects ([www.seri.at/projects](http://www.seri.at/projects))

Our projects are the main part of our work. They cover a wide range of themes and approaches, as well as having different aims. Some are mainly research projects aiming at bringing forward the state of the knowledge, some try to bring the knowledge on sustainability directly to the public and decision makers. To learn more about the themes and approaches that we follow in our projects, visit our website: [www.seri.at/themes](http://www.seri.at/themes) and [www.seri.at/approaches](http://www.seri.at/approaches).

### *New projects*



#### ***A Region on its Way to Itself***

duration: July 2006 - April 2007

funding: Regional development association Niederösterreich Mitte and regional government of Lower Austria

SERI has been commissioned by the regional management „NÖ Mitte“ and the government of Lower Austria (Department of Regional Politics) to consult the middle region of Lower Austria „on its way to itself“. The region seeks to think about predominant megatrends and their influences on the region, in order to find a way that optimally fits to the qualities and requirements of the region. SERI, in cooperation with Harald Hutterer from Karuna Consult, Michael Fleischmann, from the regional consulting bureau „Raum-Region-Mensch-Organisation“, and Rita Trattnigg, will support the region by starting a participatory process aiming at identifying the region's qualities and possibilities to achieve well-being for its inhabitants.

For further information please visit [www.seri.at/noe-mitte](http://www.seri.at/noe-mitte) or contact Lisa Bohunovsky ([lisa.bohunovsky@seri.at](mailto:lisa.bohunovsky@seri.at)).

#### ***DEEDS***

duration: October 2006 - September 2008

funding: European Commission, DG Research, Erasmus Program

DEEDS has a twofold task. On the one hand, it will develop and test curricula for the education of designers introducing the notion and concept of sustainability into design education. On the other hand it will support the application of sustainable design amongst professionals of the profession.

SERI Germany collaborates with leading design schools, researchers and professionals developing and testing the educational material. The specific contribution of SERI Germany is the know-how on conceptualising and operationalising sustainability. The project is led by the ICIS Foundation, located in Hornbaek, Denmark

A project web site is currently being designed; for more information contact SERI Germany, Joachim Spangenberg ([Joachim.Spangenberg@gmx.de](mailto:Joachim.Spangenberg@gmx.de)).



#### ***Effects of resource savings on environment, employment and economy in Austria***

duration: January 2006 - January 2007

funding: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management

This project addressed the question, which environmental, economic and employment effects occur if firms increase their investments in resource productivity.

Together with the project sponsor and experts four scenarios were defined, which specify how an increased dematerialization may look. Afterwards the scenarios were simulated until 2020 using a new integrated ecological-economic model for Austria. The results show that resource cost savings may lead to substantial economic improvements and employment increases. However, due to the rebound effect the high efficiency gains do not provide material use savings.


For further information please see [www.seri.at/resa](http://www.seri.at/resa) or contact Andrea Stocker ([andrea.stocker@seri.at](mailto:andrea.stocker@seri.at)).

***Evaluation of the "Ecological Footprint"***

duration: October 2006 - January 2007

funding: German Environmental Protection Agency (UBA)

Together with Best Foot Forward in Oxford, UK and ECOLOGIC in Berlin, Germany, SERI carried out a project for the German Environmental Protection Agency, which provides a comprehensive evaluation of the indicator "Ecological Footprint" and the underlying accounting system. The project focused on the evaluation of the quality of data and coefficients used in the German National Footprint Accounts and the elaboration of methodological strengths and weaknesses of the Footprint concept. The project also dealt with key issues with regard to the interpretability of the indicator, such as the use of the unit "global hectare" and the interpretation of "ecological surplus" versus "ecological deficit".


For more information, visit [www.seri.at/UBAFootprint](http://www.seri.at/UBAFootprint).

***FORESCENE - Development of a forecasting framework based on robust and scientifically sound scenarios to support the EU Sustainable Development Strategy***

duration: December 2005 - May 2008

funding: European Commission, DG Research, 6<sup>th</sup> framework programme

FORESCENE develops an analytical framework for consistent environmental sustainability scenario building in areas such as water, soil, biodiversity, waste and natural resources. The project focuses on backcasting methods, to identify different scenarios leading to the achievement of future targets. FORESCENE achieves this aim through description of environmental problems, review of associated policy objectives and indicators, the definition of goals for integrated sustainability scenarios, determination of the methodology for their measurement, and development and evaluation of scenarios such as Business-As-Usual (BAU), example projections (forecasting), and alternatives. The results will be recommendations for future policy development, regarding the Sustainability Strategy of the EU, and the regulatory framework for extended Impact Assessments; recommendations for the improvement of official information systems, and concrete proposals for the use and extension of existing simulation models.

In October 2006, SERI organised one of the policy workshops, focusing on the activity/policy field "Industry/Economy". 14 distinguished international experts plus several stakeholders discussed the framework for the development of European sustainability scenarios in this activity field, focusing on goals/targets, main sustainability elements and key instruments and policy measures suitable to achieve the stated targets.

For further information see [www.seri.at/forescene](http://www.seri.at/forescene) or contact Stefan Giljum ([stefan.giljum@seri.at](mailto:stefan.giljum@seri.at)).

***GoverNat - Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe***

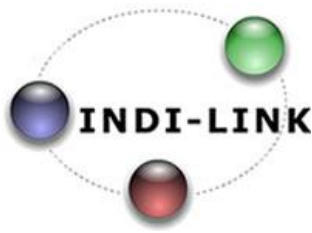
duration: October 2006 - September 2010

funding: EU 6<sup>th</sup> framework programme Marie Curie Research Training Network

This project is coordinated by Felix Rauschmayer from the UFZ and involves 10 core partners, as well as a set of praxis hosts. The overall objective of GoverNat is to develop new solutions for multi-level environmental governance and to facilitate their use by decision makers in an enlarged EU. The central research objective is to test the hypothesis that certain participatory processes and analytical decision tools are particularly useful for improving multi-level environmental governance.

SERI acts as a praxis affiliate and will host 1-2 fellows in internships, where the fellows can experience from the "insider perspective" the challenges of making decisions on environmental governance at different spatial scales.

For more information about this project visit its website [www.governat.eu](http://www.governat.eu) or contact Ines Omann ([ines.omann@seri.at](mailto:ines.omann@seri.at)).



***INDI-LINK - Indicator-based Evaluation of Interlinkages Between Different Sustainable Development Objectives***

duration: November 2006 - April 2009

funding: European Commission, DG Research, FP6

The INDI-LINK project has three main objectives: (1) further improvement of the EU set of sustainable development indicators (SDI), in particular, of selected "best-needed" headline indicators; (2) assessment of interlinkages between the different priorities of the EU SDS applying selected analytical tools and indicators from the EU SDI set and (3) deriving conclusions for future SD policy making, in particular for an effective implementation of the renewed EU SDS with a focus on policy integration across different SD dimensions.

For more information contact Friedrich Hinterberger ([friedrich.hinterberger@seri.at](mailto:friedrich.hinterberger@seri.at)) or visit [www.indi-link.net](http://www.indi-link.net).

***Inner Calling and Self Esteem as a New Way***

duration: August 2006 - December 2006

funding: job service center of Lower Austria (AMS Niederösterreich)

SERI coordinated the pilot project "Inner Calling and Self Esteem as a new way" which started in August 2006. The project is a new action of the job service center of Lower Austria. It was dedicated to older people searching for a job for more than 12 months. The project uses a new methodology called "Selbst und Wert" which seeks to augment the self esteem of each person and therewith the personal capability and possibility of finding a new occupation. All participants said after the project that they were very content and were quite confident about finding a new job, based on their experiences and personal visions.

For more information on the project and the new methodology click at [www.selbstundwert.org](http://www.selbstundwert.org) or contact Doris Schnepf ([doris.schnepf@seri.at](mailto:doris.schnepf@seri.at)).

***Low Carbon Technologies***

duration: December 2006

funding: Triple Innova

On behalf of Triple Innova (Germany) and the English investment company Low Carbon Accelerator SERI analysed technologies invented by Austrian companies that help to decrease CO2 emissions. For further information contact Mark Hammer ([mark.hammer@seri.at](mailto:mark.hammer@seri.at)).



***MELIA - Mediteranean Dialogue on Integrated Water Management***

duration: September 2006 - August 2010

funding: EU FP6, INCO-MED programme

The MELIA project aims at structuring a dialogue among key stakeholders concerned and affected by water use and management. In this view, there is a need for horizontal and vertical integration and dialogue. The achievement of this dialogue and the dissemination and exploitation of the recommendations obtained should create real added value at the European and Mediterranean scale.

SERI is leader of WP 7 "Water Participatory Management and Water Governance", responsible for the compilation of a conceptual frame and use of "integrated participatory management in water" and co-leader of WP 9 "Knowledge share", where SERI is responsible for the creation of a methodological-conceptual frame for knowledge transfer within the project

For more information see [www.meliaproject.eu](http://www.meliaproject.eu) or contact Doris Schnepf ([doris.schnepf@seri.at](mailto:doris.schnepf@seri.at)).





***petrE - Resource Productivity, Environmental Tax Reform and Sustainable Growth in Europe***

duration: July 2006 - June 2009

funding: Anglo-German Foundation (AGF); Research Initiative "Creating Sustainable Growth in Europe"

This new project, funded by the German Anglo Foundation is coordinated by Paul Ekins from the Policy Studies Institute. Other project partners are SERI, Cambridge Econometrics, Free University Berlin, Institute for Economic Structures Research, Osnabrück, and the University of Economics, Prague.

The petrE project applies different economic-environmental models on the country, European and global level to investigate the major issues related to resource productivity and Environmental Tax Reforms (ETR), including both economic and environmental implications and impacts, in single countries, within the EU and in the global economy. Within petrE, SERI is responsible for the work package on "Global Dimensions of Sustainable Growth in Europe". This work package investigates world-wide consequences of a European transformation towards sustainable growth based on an environmental tax reform and significantly increased resource productivity.

For more information, see [www.seri.at/petre](http://www.seri.at/petre) or contact Stefan Giljum ([stefan.giljum@seri.at](mailto:stefan.giljum@seri.at)).



***PSS Strategies: Development of Strategies for Designing and Implementing Sustainable Product-Service Systems***

duration: February 2006 - January 2008

funding: Federal Ministry of Transport, Innovation and Technology; Research Programme Factory of Tomorrow.

Based on the project "Best practices for examples of product service systems", this project will present the results of the previous project to companies in a workshop series and will elaborate strategies to implement sustainable PSS together with the companies.

The first workshop was held on November 22nd at the Technical University of Vienna. Strategies for developing sustainable PSS in the fields of recycling and ecodesign were discussed with researchers and companies.

For further information see [www.serviceinnovation.at](http://www.serviceinnovation.at) or contact Mark Hammer ([mark.hammer@seri.at](mailto:mark.hammer@seri.at)).

***Product-service Systems in the Online Course Sustainability-Skills***

duration: February 2006 - June 2007

funding: Federal Ministry of Transport, Innovation and Technology, Research Programme Factory of Tomorrow

SERI participates in a project that improves an online course on sustainability for founders of new companies ([www.sustainability-skills.at](http://www.sustainability-skills.at)) and promotes this course for an integration into the programme of Austrian universities of applied sciences (Fachhochschulen).

For further information contact Mark Hammer ([mark.hammer@seri.at](mailto:mark.hammer@seri.at)).

## Ongoing projects



### **ALARM - Biodiversity Assessment and Analysis of Pressures on Biodiversity**

duration: February 2004 - January 2009  
funding: EU, 6<sup>th</sup> Framework Programme

ALARM is essentially a project to improve the instruments for assessing the threat to and the loss of biodiversity in Europe, and on this basis to derive suggestions about how to stop the negative trends. 67 institutes from all over the European Research Area and beyond are working together for five years. SERI has been responsible for the co-ordination of the socio-economic module until July 2006 (in charge: Joachim H. Spangenberg; this task, the corresponding budget and staff were transferred to the UFZ in July) including four socio-economic institutes Université Versailles St.-Quentin-en-Yvelines, Universitat Autònoma Barcelona, Stockholm Environmental Institute Tallinn and SERI. The ongoing portfolio of SERI GmbH in ALARM comprises analysing the socio-economics of climate change and its impact on biodiversity (in charge: Jill Jäger, Ines Omann).

The year 2006 started with a general project meeting in Lisbon in February 2006. This meeting included socio-economic team meetings as well as discussions with colleagues from the biosciences on how to integrate the two parts of ALARM. During the year we mainly worked on our case study, the socio-economic modelling of the three scenarios and the shock scenario. We started the editorial work as well as writing two papers for a special issue on Economics "Re-examining the DPSIR framework: Implications for policies" to be submitted to the journal Ecological Economics.

For further information see [www.seri.at/alarm](http://www.seri.at/alarm) or contact Ines Omann ([ines.omann@seri.at](mailto:ines.omann@seri.at)) or Jill Jäger ([jill.jaeger@seri.at](mailto:jill.jaeger@seri.at)).



### **ESEE Website**

duration: November 2005 - October 2007  
supported by: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management

SERI maintains the website of the European Society for Ecological Economics (ESEE) and publishes the electronic ESEE newsletter. ESEE is a non-profit, member-governed organisation dedicated to advancing understanding of the relationships among ecological, social and economic systems for the mutual well-being of nature and people. You can visit the webpage on [www.euroecolecon.org](http://www.euroecolecon.org).

For further information contact Andrea Stocker ([andrea.stocker@seri.at](mailto:andrea.stocker@seri.at)).

### **GEO 4 - Chapter 8**

duration: 2005 - 2007  
funding: UNEP through SCOPE

The Global Environment Outlook (GEO) is the flagship product of the United Nations Environment Programme ([www.unep.org](http://www.unep.org)). The next GEO (GEO-4) will be published in September 2007, 20 years after the Brundtland Report "Our Common Future". It will review the state of the environment, environmental policy and scenarios for the future in the context of sustainable development.

Jill Jäger is a Co-ordinating Lead Author of Chapter 8 of GEO-4. The chapter deals with well-being and vulnerability and the policy options for improving well-being and reducing the vulnerability of the human-environment system. In 2006, meetings were held in Nairobi, Potsdam (Germany) and Cairo to finalise writing the chapter and responding to the reviews.

For further information see [www.unep.org/geo](http://www.unep.org/geo) or contact Jill Jäger ([jill.jaeger@seri.at](mailto:jill.jaeger@seri.at)).



**MATISSE - Methods and Tools for Integrated Sustainability Assessment**

duration: April 2005 - March 2008

funding: EU, 6<sup>th</sup> Framework Programme

SERI is a core partner of this Integrated Project funded under the 6th Framework Programme of the EU. The objective of MATISSE is to achieve a step-wise advance in the science and application of Integrated Sustainability Assessment (ISA) of EU policies. In order to reach this objective the core activity of the MATISSE project is to improve the tool kit available for conducting Integrated Sustainability Assessments.

Project Meetings were held in Sweden and Greece and SERI hosted the core group meeting near Salzburg in March. SERI has participated in the study of the role of environmental technologies in transitions to sustainability in the Czech Republic, including participating in two stakeholder workshops in Prague in 2006. In addition, we have continued to maintain the MATISSE web-site, produced a revised dissemination strategy and briefing sheets. Furthermore, the editing and posting of a Working Paper series has started the wider distribution of project results.

For further information see [www.matisse-project.net](http://www.matisse-project.net) or contact Jill Jäger ([jill.jaeger@seri.at](mailto:jill.jaeger@seri.at)).



**Modelling Sustainable Energy Scenarios**

duration: December 2005 - December 2007

funding: Federal Ministry of Transport, Innovation and Technology in the programme „Energy Systems of Tomorrow“

The project investigates possible economic, social and environmental effects of an increasing use of renewable energy resources for heat and power. A macro-econometric, multi-sector model is used to simulate five different energy scenarios with a focus on renewable energy technologies for Austria until 2020.

The process of scenario modelling (from the development of scenarios to the dissemination of the modelling results) integrates participative elements, since stakeholders (representatives of interests, politicians, experts) in energy policy and supply are actively involved in the scientific work. Therefore, the research and decision process not only builds upon work of researchers, but also integrates knowledge, expertise and preferences of stakeholders.

In order to reach a praxis-oriented and transparent modelling process, around 25 stakeholders and experts are integrated throughout the whole project. In 2006 two workshops took place: On April 4th, 2006 SERI organised the first stakeholder workshop of the project. The aim was to get suggestions and inputs for the scenarios development.

In the second workshop on 19<sup>th</sup> December, 2006 the new scenarios were presented and discussed with the stakeholder group. Two more workshops are planned during this 2-year project. With the help of this participatory character the project promotes the intensive exchange of experiences between researchers on the one hand and users of the results from policy, economy and society on the other hand. In this respect the project contributes to the connection of science and practice by improving the dialogue between stakeholders and researchers and by enhancing the transparency of modelling.

For further information please visit [www.energiemodell.at](http://www.energiemodell.at) or contact Andrea Stocker ([andrea.stocker@seri.at](mailto:andrea.stocker@seri.at)).

**SPACES**

duration: 2005-2007

funding: David and Lucile Packard Foundation

The goal of the SPACES (Sustainable Production and Consumption Systems) project is to arrive at an improved framework and agenda for research and action on the sustainability of production and consumption systems. It focuses on answering two kinds of questions: 1. What knowledge is most needed for societies to pursue sustainability through the integrated management of production-consumption systems? 2. Where appropriate knowledge already exists, but is not being effectively used, what could be done to narrow the knowledge-to-action gap? And, where the needed knowledge appears to be absent, how can research be re-oriented to address the sustainability problems in the production-consumption system?

In 10 case studies – based in the fields of agriculture, tourism, energy and lifestyles – the project assessed which sustainability knowledge is available for the different steps of the product chain and among other stakeholders (governments, media) and which power exists to transform this knowledge to action (or not). In an one-month web-based conference the participants discussed the general concept and case studies and developed them further.

While all cases have different settings several similarities could be observed in some cases: Some very specific knowledge creates a form of alarmism with media and public attention. Some consumers – mostly supported by NGOs - start to ask for alternatives. With the development of niche markets alternatives a broader shaping and framing of norms and values also takes place that either leads to the establishment of regulation or to voluntary changes in the market.

For further information see [www.seri.at/spaces](http://www.seri.at/spaces) or contact Sylvia Lorek ([sylvia.lorek@seri.de](mailto:sylvia.lorek@seri.de)).

### ***Sufotrop Sustainable Food Consumption in Austria: Trends and Options***

duration: October 2005 - June 2007

funding: Austrian Academy of Science - Global Change Programme

Project Partner: Wegener Center Graz, Dr. Birgit Friedl

The project focuses on food consumption patterns in Austria and, by relating them to economic data from households, it makes policy recommendations related to sustainable food consumption.

The first year of “Sustainable Food Consumption in Austria: Trends and Options” was successfully finished with the final report (download at [www.seri.at/sufotrop](http://www.seri.at/sufotrop)). The overall objectives of the project are to contribute to a transition to more sustainable food consumption in Austria through an improved understanding of food consumption patterns and trends and their direct environmental impacts, to identify key policy options for enhancing sustainable food consumption and to discuss the acceptability of and potential barriers to these measures. Main aims of the first year (October 2005 – September 2006) were to

1. carry out a literature survey on trends in food consumption and the associated environmental effects;
2. produce a concise description of trends in food consumption in Austria;
3. establish an econometric data set, combining income and environmental impact data from the Austrian Consumption Survey, the official Austrian Nutrition Report etc.;
4. define sustainable food consumption and select food categories to be further worked on in the project;
5. select suitable indicators of sustainable food consumption (chapter 6).

In the second year of the project we will calculate environmental effects of current Austrian food consumption, analyse the consumption behaviour for different household characteristics and thus the environmental impacts of them. We will examine the relationship between household consumption expenditures and the degree of sustainability of food consumption in order to identify key driving forces for and impacts of food consumption patterns, as well as key policy options for enhancing sustainable food consumption.

For further information see [www.seri.at/sufotrop](http://www.seri.at/sufotrop) contact Ines Omann ([ines.omann@seri.at](mailto:ines.omann@seri.at)).



### ***www.nachhaltigkeit.at***

duration: December 2003 - April 2007

funding: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management

The Austrian sustainability website of [www.nachhaltigkeit.at](http://www.nachhaltigkeit.at) has been extended. Every month a new "theme of the month" was prepared by one of the participating institutions: ZSI, IUW and SERI. Themes prepared by SERI in the past year (texts are available in German only):

#### **March 2006 – Life quality and Sustainable Development**

In this article we explain how the concept of life quality (similarly used terms are happiness, well-being) is interlinked with sustainable development and why this concept is getting more and more important politically. We then go - with a range of examples - further into the realms of "objective life quality" and "subjective life quality", and how they can be measured.

### **May 2006 - Resource productivity and Sustainability**

Together with Christopher Manstein from the Factor 10 Institute Austria - SERI contributed to the theme of "resource productivity and sustainability". The topic gives an overview of current developments in resource productivity, political initiatives for increasing productivity in Austria, the EU and on the international level as well of international aspects, actions for increasing productivity in companies and a discussion of the rebound effect.

For further information see [www.nachhaltigkeit.at/reportagen.php3](http://www.nachhaltigkeit.at/reportagen.php3) or contact Doris Schnepf ([doris.schnepf@seri.at](mailto:doris.schnepf@seri.at)).

## Finished projects



### **ARTEMIS – Assessment of Renewable Energy Technologies on Multiple Scales – A Participatory Multi-Criteria Approach**

duration: June 2003 - June 2006

funding: Fonds zur Förderung Wissenschaftlicher Forschung

The aim of the research project was to apply, critically assess and develop further participatory multi-criteria evaluation (MCE) of selected future energy scenarios, and of individual renewable energy technologies (RETs), based on sustainability criteria of different dimensions (social, economic, environmental, institutional) in Austria.

Energy scenarios for Austria for 2020 and evaluation criteria were developed in cooperation with energy experts and stakeholders at two different spatial levels (local and national). The scenarios were then ranked and evaluated using the multi-criteria evaluation (MCE) method PROMETHEE. The results of the national case study were discussed with stakeholders in order to understand the conflicts of interests in the energy field, the potential for compromises, and the consequences of certain energy technology pathways. The results of the local case study are being used in the e5-process of the involved communities, which started in 2006. The e5-programme assesses and certifies local communities with respect to their attempts to use energy more efficiently and to intensify the use of renewable energy.

For further information please see [www.project-artemis.net](http://www.project-artemis.net), [www.seri.at/artemis](http://www.seri.at/artemis) or contact Ines Omann ([ines.omann@seri.at](mailto:ines.omann@seri.at)).

### **Development of GEO Training Modules**

duration: mid-2005 - mid-2006

funding: UNEP through the Regional Environmental Centre, Szentendre, Hungary

The Global Environment Outlook (GEO) is the flagship product of the United Nations Environment Programme ([www.unep.org](http://www.unep.org)). The next GEO will be published in September 2007, 20 years after the Brundtland Report "Our Common Future". It will review the state of the environment, environmental policy and scenarios for the future in the context of sustainable development.

A parallel activity to the process of producing the GEO reports is capacity building. For this purpose a training manual is being produced and tested under the leadership of the International Institute for Sustainable Development, Canada. Using this training manual, instructors will be able to guide people to develop national GEO processes. Jill Jäger (SERI) lead the development of the training module on scenarios and the training module that provides an introduction to the GEO process and the general area of integrated environmental assessment. She also contributed to the module on developing an impact strategy. In 2006 the modules were finalised and edited. The training manual will be published in 2007.

For more information see [www.unep.org/geo](http://www.unep.org/geo) or please contact Jill Jäger ([jill.jaeger@seri.at](mailto:jill.jaeger@seri.at)).

### **Environment and Innovation**

duration: December 2005 - November 2006

funding: Environment Committee of the European Parliament

The EU Parliament issued a Call for Tender for a small project on emerging environmental concepts and technologies and their implications for European environmental policy. The Tender submitted by SERI with their partners in the Netherlands (MERIT) and Finland (FFRC) was selected for funding. In January 2006 the team submitted a scoping report, which was then discussed at a meeting at the European Parliament in Brussels. The final report was submitted in October 2006 and presented in Brussels in December 2006.

The study describes six emerging environmental concepts in terms of their proponents, their potential for further use and the differences between responses in the EU and in other countries, including developing countries. The six concepts are: ecological footprint, cradle-to-cradle, dematerialization, eco-sufficiency, transition management and vulnerability.

Six emerging environmental technologies are described and assessed in terms of their scope, private and public uptake, potential for future development, potential future benefits and the differences in use between the EU and in other countries, including developing countries. The environmental technologies are: white biotechnology, hydrogen based transportation fuels, small-scale wastewater treatment systems, energy producing greenhouses, solar panels combined with heat pumps, and CO2 sequestration.

The implications of the above concepts and technologies for future EU environmental policy, for the Lisbon and EU Sustainable Development Strategy (SDS) objectives and for relationships with non-EU countries, including developing countries are discussed.

For further information see [www.seri.at/eu-inno](http://www.seri.at/eu-inno) or contact Friedrich Hinterberger ([friedrich.hinterberger@seri.at](mailto:friedrich.hinterberger@seri.at)).

### ***EU Environmental Policy Review***

duration: 2006

funding: European Commission, DG Environment

This project involved developing a methodology for and gathering information on new environment policy initiatives relevant for the EU Sustainable Development Strategy and Lisbon Strategies.

The project analysed commitments in the National Reform Programme (NRP) of the Lisbon strategy of the EU member states with regard to Guideline 11 of the Lisbon strategy (to encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth) and important recent developments (2005/2006) in environmental policy in the member states. The reports focused on the following themes and sectors:

- nature and biodiversity,
- environment and health and quality of life,
- natural resources and waste,
- energy,
- transport,
- agriculture,
- tourism,
- climate change.

SERI was responsible for the reports of Austria, Estonia, Portugal and Slovenia.

For further information contact Stefan Giljum ([stefan.giljum@seri.at](mailto:stefan.giljum@seri.at)) or see [www.seri.at/environmentalpolicies](http://www.seri.at/environmentalpolicies).

### ***FX-EU - Faktor X and the European Union***

duration: September 2005 - September 2006

funding: Aachen Foundation Kathy Beys

This project developed three main outputs:

1. A study on policy processes and legislative initiatives of the EU that could contribute to increasing the energy and resource efficiency of the European Union, prepared by Martin Rocholl, Friends of the Earth Europe, Kai Schlegelmilch from Green Budget Germany and Stefan Giljum from SERI. The completely revised 2nd edition of the study was published in October 2006.
2. A background paper on "Resource use indicators in the EU" prepared by SERI in cooperation with Mathis Wackernagel and Justin Kitzes from the Global Footprint Network.
3. A consensus statement on the importance of national material flow accounts, signed by a number of important institutions working in the field of material flow accounting and Ecological Footprinting.

Papers and reports can be downloaded from [www.seri.at/FX-EU](http://www.seri.at/FX-EU). Contact: Stefan Giljum ([stefan.giljum@seri.at](mailto:stefan.giljum@seri.at)).

### ***Governance and Well-being***

duration: December 2005 - June 2006

funding: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management

One of the key objectives of a democratic government is to improve the quality of life for the citizens. In the review process for the European Strategy for Sustainable Development (SDS) a "continuous dialogue with the people and organisations ... who are engaged and committed to making change happen" is recommended. "The challenge is to translate ... [the Europeans'] awareness [of sustainability] into more sustainable behaviour."

In the course of the preparation of the revised European Strategy for Sustainable Development, SERI in cooperation with Harald Hutterer (Karuna Consult) produced a background document on the concept of well-being in the long-term vision of the European SDS. This information was also used as input for a Focus Group on "Well being and Governance", which took place in June 2006 and was organised by SERI and the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management.

For further information please contact Friedrich Hinterberger ([friedrich.hinterberger@seri.at](mailto:friedrich.hinterberger@seri.at)) or see [www.seri.at/wellgov](http://www.seri.at/wellgov).



***MOSUS - Modelling opportunities and limits for restructuring Europe towards sustainability***

duration: February 2003 - January 2006

funding: European Commission, DG Research, FP5

MOSUS applied a global ecological-economic simulation model to quantify the interrelations between socio-economic driving forces and the state of the environment and to evaluate the economic and social impacts of key environmental policy measures in the EU. MOSUS formulated EU development scenarios and evaluated the economic and social impacts of key environmental policy measures in order to present quantified policy recommendations for responding to environmental challenges and changes.

In 2005, the modelling exercises were carried out and the different scenarios were evaluated with regard to their consequences for economic, environmental and social indicators. The mix of environmental policy measures simulated in the different sustainability scenarios showed that the implementation of policies primarily geared towards decoupling economic activity from material and energy throughput can actually be conducive to economic growth. These results are contrary to the popular assumption that such policies will mainly raise costs for enterprises, decrease competitiveness and thus have an opportunity cost in terms of foregone output. The scenario results support the view that increasing resource and energy productivity can actually improve the position of European industries on world markets and thus also lead to the creation of new jobs. From this perspective, environmental policy becomes one of the key strategies to reach the goals of the Lisbon Strategy.

For further information please see [www.seri.at/mosus](http://www.seri.at/mosus) or contact Stefan Giljum ([Stefan.Giljum@seri.at](mailto:Stefan.Giljum@seri.at)).



***NEDS - Nachhaltige Entwicklung zwischen Durchsatz und Symbolik (Sustainable Development between Throughput and Symbolism)***

duration: October 2002 - March 2006

funding: German Federal Ministry of Education and Research; Research Programme Social Ecological Research (SÖF)

The project analysed natural, economic, discursive, and spatial aspects of sustainable development for the metropolitan regions of Hamburg, Vienna and Leipzig. One of the main research questions of the project was: how do we get from ideas and concepts to policy and, finally, to material effects on the environment? In order to understand the links involved here, the project combined methods that focus on the economic and biophysical side of our society (material consumption, land use) and methods that focus on social aspects (discourses and networks).

The analysed regions are the metropolitan regions of Hamburg, Vienna and Leipzig – including the cities and their surrounding provinces. The analysed period runs from 1992-2001. SERI contributed to the project with a material flow analysis (MFA) for the three regions.

In 2006 the calculations for the material flow analysis have been finished. Results have been published as NEDS Working Paper and in the journal "Natur und Kultur" (see publications section in this report).

For further information see [www.seri.at/neds](http://www.seri.at/neds), [www.neds-projekt.de](http://www.neds-projekt.de) or contact Mark Hammer ([mark.hammer@seri.at](mailto:mark.hammer@seri.at)).





***Thematic Network Sustainability Strategy:  
Improvement of sustainability strategy elaboration  
for economic, environmental and social policy in  
Europe***

duration: May 2003 - October 2006

funding: European Commission, DG Research, FP5

The objective of the sustainability strategy project was to use the diversity of scientific approaches to the problems of sustainability as a resource for improving the European Sustainability Strategy, its further elaboration and implementation. This required the creation of a trans-disciplinary network focused on sustainable development, bringing together technical, economic and political science insights, and capable of monitoring the European Sustainability Strategy, while building a bridge to experts' and civil society networks committed to European policy co-ordination.

Throughout 2006, the project continued to hold a series of meetings in Berlin and Brussels. The network developed an in-depth analysis of the EUSDS II and its political environment (including the role of national SDS and the Lisbon process), which has been used to derive suggestions for improvement the policy process. A comprehensive Synthetic Model, as a feasible alternative to the Commission suggestions for the future work on sustainable development was discussed with stakeholders in spring 2006, the publication of the revised version is due in Spring 2007. The final conference of the project was held in Brussels in September 2006, but the network of participants will continue to meet and collaborate. A publication series edited by the Free University of Berlin continues to make the project results publicly available.

For further information please visit [www.seri.at/tnwss](http://www.seri.at/tnwss) and [www.sustainability-strategy.net](http://www.sustainability-strategy.net).

## Upcoming projects

Besides projects which we worked on in 2006, we also include the future projects that are already under contract in our annual report. The majority of them are projects for the European Commission due to the fact that this type of projects has a long lead time.

### ***EACH-FOR - Environmental Change and Forced Migration Scenarios***

duration: January 2007 - December 2008

funding: European Commission, 6<sup>th</sup> Framework Programme

The project's general objectives are to support European policies, research and the civil society with 'forced migration' scenarios, and cooperate with other migration and environment degradation related projects and institutions. The objectives will be achieved by five interlinked research sequences: 1) forecasting the natural and anthropogenic causes of forced migration; 2) analysing direct (e.g. desertification) and indirect (e.g. conflicts) environmental effects on livelihoods; 3) predicting potential forced migration flows, with emphasis on environmental refugees; 4) contributing to the preparation of statistical indicators to measure environmental refugee flows; 5) dissemination.

SERI will provide input on scenarios for environmental degradation, available data for the case studies and a literature overview on other studies of environmentally forced migration.

The responsible person at SERI is Jill Jäger ([jill.jaeger@seri.at](mailto:jill.jaeger@seri.at)), the Coordinator is Andras Vag ([andras.vag@atlasco.hu](mailto:andras.vag@atlasco.hu)).

### ***EcoChange - Challenges in assessing and forecasting biodiversity and ecosystem changes in Europe***

duration: January 2007 - December 2011

funding: European Commission, 6<sup>th</sup> framework programme

The aim of EcoChange is to assess and forecast changes in terrestrial biodiversity and ecosystems and in the ability of biodiversity and ecosystems to supply goods and services and to buffer against climate and land use change.

SERI will lead the socio-economic part of the project. This includes the gathering of socio-economic data as an input for land use change scenarios. Moreover, SERI will lead the workpackage that develops an integrated sustainability assessment (ISA; see MATISSE) of the impacts of environmental change on ecosystem goods and services (EGS) as well as leading together with partners from France the development of the science-policy interface.

For further information please contact Ines Omann ([ines.omann@seri.at](mailto:ines.omann@seri.at)).

### ***EXIOPOL - A New Environmental Accounting Framework Using Externality Data and Input-Output Tools for Policy Analysis***

duration: March 2007 - February 2011

funding: European Commission, DG Research, 6<sup>th</sup> framework programme

The integrated project "EXIOPOL" has three principal objectives:

- 1) To synthesize and develop comprehensive estimates of the external costs for Europe of a broad set of economic activities;
- 2) To set up a detailed environmentally extended (EE) Input-Output (I-O) framework, with links to other socio-economic models, in which as many of these estimates as possible are included. Such an EE I-O table for the EU 25 does not exist. This will allow for the estimation of environmental impacts and external costs of different economic sector activities, final consumption activities and resource consumption for countries in the EU;
- 3) To apply the results of the external cost estimates and EE I-O analysis for the analysis of policy questions of importance, as well as to evaluate the impact of past research on external costs on policy-making in the EU.

SERI will contribute to the development of environmental data for the EU-25 and will coordinate the workpackage on environmental extensions of the global Input-Output model.

For further information please contact Stefan Giljum ([stefan.giljum@seri.at](mailto:stefan.giljum@seri.at)).

***NASPA Sustainable Sanitation Systems – Practical Applications***

duration: February 2007 - June 2009

funding: Österreichische Kommunalkredit, Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management

Conventional sanitation systems are not always the ecological and economical best option, especially for remote rural settlements. The necessity to support sustainable sanitation systems was recognised increasingly during recent years, but due to a lack of operating experience only rarely applied. By means of five objects (2 rural settlements, a housing estate, an office building and a private home), new options for sustainable sanitation systems are analysed and recommendations are developed.

The objectives of the project are to:

- 1) analyse the current water management and demonstrate the potential of water saving technologies;
- 2) optimize greywater- and blackwater reed-bed treatment plants (constructed wetlands);
- 3) develop optimized guidelines and operation concepts for service water and reed-bed sludge treatment plants;
- 4) raise awareness of sustainable sanitation systems through participatory planning.

As alternative sanitary systems are often controversially discussed in public and politics, SERI will accompany one of the case studies with an acceptance analysis in order to learn more about the main pros and cons and to start a positive discussion in the case study area.

Further information will be available on the website soon after the start of the project. Or contact Lisa Bohunovsky ([lisa.bohunovsky@seri.at](mailto:lisa.bohunovsky@seri.at)).

***Peer review of the Dutch National Sustainability Strategy***

duration: January - June 2007

funding: Government of the Netherlands

The Netherlands government decided to have a peer review of its NSDS, following the call to do so in the revised EU SDS. As peer countries, Finland, South Africa and Germany were chosen, represented by one person each from government, civil society, business and science. Joachim H. Spangenberg, deputy chair of SERI Germany was nominated to be the representative of German science.

For more information see [www.rmno.nl](http://www.rmno.nl), or contact Joachim Spangenberg ([Joachim.Spangenberg@gmx.de](mailto:Joachim.Spangenberg@gmx.de)).

***Potential of the Ecological Footprint for Monitoring Environmental Impact from Natural Resource Use***

duration: January - December 2007

funding: European Commission, DG Environment

This project provides an evaluation of the Ecological Footprint (EF) as a potential indicator for monitoring environmental impacts and an assessment of whether a combination of the Ecological Footprint with other related tools and indicators could fulfil known requirements. The project will elaborate the specific advantages and shortcomings of the Ecological Footprint and will assess whether and how other indicators could complement the Ecological Footprint.

The project will be orientated towards potential policy applications in the EU and will reach beyond the level of assessing only the methodological soundness of the Ecological Footprint and complementary measures. In addition, the tasks to be performed in this project will incorporate the views of stakeholders and experts.

SERI is responsible for the evaluation of a large number of potential methods, tools and indicators with regard to their potential for measuring environmental impacts of resource use.

For further information see [www.seri.at/comfootprint](http://www.seri.at/comfootprint) or contact Mark Hammer ([mark.hammer@seri.at](mailto:mark.hammer@seri.at)).

**SCOPE<sup>2</sup> - Sustainable Consumption Policies Effectiveness Evaluation**

duration: 2007 - 2009

funding: European Commission, DG Research, 6<sup>th</sup> framework programme

How can policy instruments lead to greening of the markets and stimulate more sustainable consumption patterns by individuals and households? From extensive insights on Integrated Product Policy, Sustainable Consumption and Sustainable Transitions, it is clear that simple policy approaches will not work. Consumers are often not as sovereign as thought, and many sustainable business initiatives have died out in silence due to a lack of reward in the market. Direct interventions like regulation or financial instruments appear to be too crude, or even inadequate, when the sustainability problem is caused by 'lock-in' problems or other market failures. Therefore the project goes beyond developing an inventory and analysis of relevant policy instruments and their success and failure factors and observes them from a systems perspective.

For further information please contact Sylvia Lorek ([sylvia.lorek@t-online.de](mailto:sylvia.lorek@t-online.de)).

# Cooperation

## ***SERI is a new member of the Research Platform Eisenwurzen***

Friedrich Hinterberger and Ines Omann attended a 2-day workshop about the state and future of the multifunctional research platform (MFRP) Eisenwurzen in Austria. This platform is based on a concentration of research infrastructure and research projects in a well-documented region covering parts of Styria, Upper and Lower Austria (for more see [http://www.umweltbundesamt.at/umweltschutz/oekosystem/ter\\_allgemein/mfrp\\_konzept/](http://www.umweltbundesamt.at/umweltschutz/oekosystem/ter_allgemein/mfrp_konzept/)).

The workshop took place at the national park centre in Molln (Nationalpark Kalkalpen: <http://www.kalkalpen.at/>) with 36 participants, coming from research institutes, the platform management (Umweltbundesamt), local government, other national parks and regional management offices.

The aims of the workshop were

- (1) to inform all the actors within the MFRP about the current state of the platform and opportunities for future research and implementation of results
- (2) to give an overview of the regional demand for research and compare it with the supply of research potentials and interests
- (3) to define the services the platform should offer within the next 3 years

Main results of the workshop are:

- seven areas of research which are of importance for the region
- agreed specification of the work that the platform and its management should carry out
- suggestion to improve the information flow between researchers and regional actors.

SERI is a new member of this platform and plans to start research projects together with other actors (researchers and stakeholders) in Eisenwurzen in the area of socio-economic issues such as well-being, job creation or energy autarchy.

## ***SERI is new member of the Global Footprint Network (GFN)***

In June 2006, SERI joined the Global Footprint Network as an official partner institution. Stefan Giljum participated in the first Global Footprint Forum, held in Siena, Italy, in June 2006.

For more information about the Global Footprint Network, click [www.footprintnetwork.org](http://www.footprintnetwork.org).

## ***SCORE!- Sustainable Consumption Research Exchange***

SCORE! (Sustainable Consumption Research Exchanges) is an EU-funded 6th Framework Program project with the mission to organise a leading science network on Sustainable Consumption and Production. SCORE! runs between 2005 and 2008, consists of 28 institutions, and will involve and structure a larger community of a few hundred professionals in this field, in the EU and beyond. SERI is one of the member organisations and involved in the development of a long term perspective to establish an independent and global network.

Among others SCORE! supports the development of a UN 10 Year Framework of Programs on Sustainable Consumption and Production (SCP), as formally agreed upon by world leaders during the World Summit on Sustainable Development in Johannesburg, 2002.

## ***Weisssee 2250***



SERI is scientific Partner of "Weisssee 2250", an initiative launched by Comdao Institut für Vernetzung. Under the heading of "Sustainable Innovation. Now", a competition will present concepts for "making a difference": how would it be if the world would already take ecological limits into account. Dr. Friedrich Hinterberger is head of the selection panel.

For more information: <http://weisssee2250.comdao.org/>.

***FIN-MIPS Household - Promoting Sustainable Consumption***

SERI was cooperating partner in a project of the Finnish Association for Nature Conservation which tests the application of the MIPS-concept for increasing the sustainability of private households.

In the first project phase, material input data relevant for households was gathered and new data generated on the basis of the needs discovered. In order to get a broad overview of the existing data and to avoid double work, anyone who has done studies (study work, diploma thesis, master's thesis, dissertation, etc.) relevant in terms of material input of household consumption, was asked to send information on the studies and their results. SERI was participating as a cooperating partner in the project.

For further information please contact Friedrich Hinterberger ([friedrich.hinterberger@seri.at](mailto:friedrich.hinterberger@seri.at)) or see <http://www.seri.at/finmips>.

## Events ([www.seri.at/events](http://www.seri.at/events))



### *Vienna Conference on "Efficiency, environment & employment 2006"*

During the Austrian Presidency of the Council of the European Union, a two day conference was organized to reflect recent developments and synergies between economic efficiency, environment and employment. The conference took place in Vienna, Austria on 8<sup>th</sup> and 9<sup>th</sup> of June 2006. The main organisers of the conference were SERI and the European Environment Agency (EEA) in cooperation with the Austrian Ministry for Agriculture, Forestry, Environment and Water, the European Topic Centre for Waste and Resources, and other partners. The Conference aimed to identify framework conditions that promote or inhibit synergies between economic efficiency, environment and employment, to share experiences of local, regional and national projects in Europe and beyond and to disseminate relevant information about success and failures to policymakers, businesses, local authorities, NGOs and other social actors.

Speakers included Michael Kuhndt, Karl Sieghartsleitner, Szilvia Gärtner, Henrik Lund, Michael Getzner, Juliet Schor, Orio Giarini, Alexander Kaiser, Beate Littig, Gunter Pauli, Helga Weisz, Bernd Meyer, Friedrich Hinterberger, Andrea Stocker, Werner Wutscher, Michael Kohlhaas, Wolfgang Pekny, David Mum and David Gee.

For further details and download of presentations see [www.eee2006.org](http://www.eee2006.org).



### ***Glücksstammtische***

SERI and Karuna Consult organised first „regulars` tables for happiness“ (Glücksstammtische). The events have a social and a programmatic part. In the programmatic part renowned persons give input on different topics related to the pursuit of happiness.

The following Glücksstammtische took place in 2006:

The 1<sup>st</sup> Glücksstammtisch took place on 17<sup>th</sup> of January at the Weltcafe in Vienna, where we talked about the key issues for the pursuit of happiness within a society. Key speaker was Harald Hutterer.

The 2<sup>nd</sup> Glücksstammtisch took place on 17<sup>th</sup> of February at the restaurant Retsina. This event was held under the title “Economics can be so fascinating”. Key speaker was Karl Gamper.

The 3<sup>rd</sup> Glücksstammtisch took place on 7<sup>th</sup> of March at the restaurant Retsina. We showed a film called „Bodenprobe“ by Sophie Huber und Martin Komarek.

For more information go to [www.gluecksstammtische.net](http://www.gluecksstammtische.net) or contact Friedrich Hinterberger ([friedrich.hinterberger@seri.at](mailto:friedrich.hinterberger@seri.at)).



**Dennis Meadows presents German translation of "Limits to growth - the 30 years update"**

In cooperation with SERI, the European Support Centre of the Club of Rome presented the German version of Dennis Meadows' book (with Donella Meadows and Jorgen Randers) at two events in Austria.

"Die Grenzen des Wachstums - das 30-Jahre Update". The book was published by Hirzel Verlag, Stuttgart, 2006.

The two events took place in Vienna, ORF-Kultur-Cafe and Stift St. Florian/OÖ. See <http://update30.at.tf> and <http://grenzen.at.tf>, respectively. A documentation of the Vienna event, edited by Thomas Schauer and Friedrich Hinterberger, can be downloaded from <http://update30.at.tf>.

In Germany, the book was presented in Stuttgart, Hamburg und Berlin.

**"Sustainability and responsibility in the concept of environmental space"**

On 9th of October 2006, Fred Luks and Sabine Höhler from the NEDS project, Hamburg (see <http://www.neds-projekt.de>) and Rafael Ziegler from the Centre Marc Bloch, Berlin, organised a workshop on "Sustainability and responsibility in the concept of environmental space".

The workshop brought together scientists, who were among the developers of this concept, such as Wolfgang Sachs, Reinhard Loske and Joachim Spangenberg, with scientists, who currently work with concepts that were derived from the environmental space approach.

Stefan Giljum presented a paper on "Global appropriation of environmental space", illustrating past trends and future scenarios of natural resource use in different world regions.

Download paper ([http://www.seri.at/documentupload/pdf/environmental\\_space.pdf](http://www.seri.at/documentupload/pdf/environmental_space.pdf)) and presentation ([http://www.seri.at/documentupload/pdf/giljum\\_es\\_presentation.pdf](http://www.seri.at/documentupload/pdf/giljum_es_presentation.pdf)).

For more information on this event, see <http://www.boell.de/calendar/viewevt.aspx?evtid=2587>.

## SERI Brownbag Seminars



The SERI Brownbag Seminars are series of lectures, where we want to discuss our own work and that of our colleagues. The lectures are mainly held in German, therefore we give German abstracts below. In 2006 the SERI Brownbag seminar series continued. Location: SERI's office in Vienna.

### January 2006

**Lokale Energieszenarien und ihre Bewertung (ARTEMIS), Lisa Bohunovsky, Ines Omann, SERI**

SERI startete im Juni 2003 ein FWF-Projekt zur Evaluierung von Technologien zur Nutzung erneuerbarer Energien auf lokaler und nationaler Ebene (ARTEMIS). Ziel der lokalen Fallstudie des Projektes war es, Energieszenarien für zwei oststeirische Gemeinden zu entwerfen und diese mittels einer partizipativen Multikriterienanalyse zu bewerten. SERI untersuchte Potenziale, Schwerpunkte und Handlungsfelder des möglichen Einsatzes von Technologien zur Nutzung erneuerbarer Energien in den Gemeinden, wobei sich das Projekt auf die Strom- und Wärmeproduktion beschränkt. Wissenschaftliches Ziel war die Durchführung einer Multikriterienanalyse zur Evaluierung von Szenarien, deren Basis verschiedene Technologien zur Nutzung erneuerbarer Energien ist.

Im Brownbag wurden der Prozess in den Gemeinden und die Ergebnisse der Forschungsarbeiten vorgestellt.



**May 2006****Europas globale Verantwortung, Stefan Giljum, SERI**

In diesem Brownbag Seminar wurden mehrere neue SERI Projekte vorgestellt, welche sich mit dem Themenkreis „Europa und seine internationalen Beziehungen“ beschäftigen. Darunter fällt das Projekt „One Planet Business“, bei dem der globale Umweltverbrauch von Industriesektoren in OECD Ländern berechnet wird, sowie das Projekt „Factor X und die Europäische Union“, bei dem Politikfelder analysiert werden, welche dazu beitragen können, Europas globalen Umweltverbrauch zu reduzieren. Die Aktivitäten in diesen Projekten wurden auch in Verbindung mit Ergebnissen bereits abgeschlossener Projekte, insbesondere dem MOSUS Projekt, dargestellt. Weiters wurde ein Hintergrundpapier mit dem Titel „Europas globale Verantwortung“ vorgestellt, welches SERI in Zusammenarbeit mit Friends of the Earth Europe präsentierte. Ziel dieses Brownbag-Seminars war es, zukünftige Akquisitions- und Forschungsschwerpunkte von SERI in diesem Forschungsfeld festzulegen.

**Next generation LTER – ein europäisches Netzwerk für sozio-ökonomische und ökologische Forschung im Aufbau, Michael Mirtl, UBA**

„Multifunctional Research Platforms“ sind die Arenen für einen neuartigen Forschungsansatz, der zum einen exzellente disziplinäre Forschung durch eine hochvernetzte Arbeitsumgebung mit einem Maximum an Basisdaten fördert. Gleichzeitig schafft er den Kommunikationsraum zur Entwicklung von Methoden zur Bearbeitung komplexer Wirkungsgefüge zwischen Gesellschaft und Natur, die nur in einem ganzheitlichen Ansatz erfassbar sind.

Das Umweltbundesamt setzt im Auftrag des BMBWK in Österreich das Netzwerk für Ökosystemare Langzeitforschung (LTER) um. Dieses Netzwerk besteht aus 2 Forschungsplattformen (MFRPs, Multifunktionale Forschungsplattformen), in denen erstmals eine integrative Bearbeitung von soziologischen, sozioökonomischen und naturwissenschaftlichen Fragestellungen im regionalen Kontext ermöglicht wird. Die Forschungsplattformen MFRP „High Alps“ (Öztaler und Stubai Alpen) und MFRP „Eisenwurz“ (OÖ, NÖ, Stmk. inkl. Westteil des Hochschwabs) sind Österreichs Beitrag zu einem europäischen Netzwerk von Forschungsregionen. Dieses Netzwerk soll die wichtigsten biogeografischen Regionen Europas abdecken und ist selbst Teil des globalen LTER-Netzwerks.

Die Forschungsplattformen sind hinsichtlich der Infrastruktur Cluster von bestehenden Forschungseinrichtungen, Regionalentwicklungsvereinen etc. Diese Element werden durch eine Management-Struktur verknüpft, die eine breite Palette von Funktionen hat (Konzeptarbeit, nationalen und internationale Vernetzung, partizipative und transdisziplinäre Arbeit in der Region, Datendrehscheibe, Kommunikationsraum, Repräsentanz.).

Nach der Etablierung der MFRP Eisenwurz (inkl. Memorandum of Understanding) als Verbund von Einrichtungen und Projekten in der Region Eisenwurz im österreichischen Kernraum (nördliche Kalkvoralpen) wird nun an der Errichtung einer permanenten Trägerschaft gearbeitet, die auch die geographisch betroffenen Länder und sonstige öffentliche Stakeholder mit strategischen Interesse an der Region umfasst.

**Stoffströme und Rechnungswesen, Christine Jasch, Institut für ökologische Wirtschaftsforschung**

Eine zuverlässige, kostengünstige und umweltschonende Versorgung mit Gütern, Produkten und Dienstleistungen ist eine wichtige Voraussetzung für die Entwicklung moderner Gesellschaften und für die Aufrechterhaltung und weitere Verbesserung der Lebensstandards. Allerdings ist trotz bemerkenswerter Fortschritte bei der Entkoppelung von Wirtschaftswachstum und Ressourcenverbrauch der globale Trend in der Entwicklung des Ressourcenbedarfs nach wie vor ungebrochen. Deshalb ist die Entwicklung von zukunftsfähigen Lebens- und Wirtschaftsmodellen erforderlich. International herrscht Einigkeit darüber, dass die Frage nach einer nachhaltigen Wirtschaftsweise zu den zukunftsbestimmenden Herausforderungen gehört und Forschung und Entwicklung eine Schlüsselrolle einnehmen. Neben technologischen Innovationen spielen dabei auch strukturelle sowie soziale Innovationen eine entscheidende Rolle.

Der Ansatz der Umweltkostenrechnung, einer der Leuchttürme im „Impulsprogramm Nachhaltig Wirtschaften“ zeigt, dass Ökoeffizienz ein wichtiges unternehmerisches Anliegen ist, welches sich auch betriebswirtschaftlich rechnet und langfristig den Unternehmenswert steigert. Denn auch

nachhaltiges Wirtschaften und ressourceneffizientes Produzieren muss sich wirtschaftlich lohnen, wenn es sich breit durchsetzen soll.

Christine Jasch nimmt seit 1999 teil an einer Arbeitsgruppe zu Environmental Management Accounting (EMA) oder Umweltrechnungswesen der UN Commission for Sustainable Development (UN CSD), in der Grundlagen zu Grundsätzen und Vorgehensweise bei der Umwelt- und Materialflußkostenrechnung erarbeitet. Die erste Publikation für diese Arbeitsgruppe zu Umweltrechnungswesen – Grundsätze und Vorgehensweise wurde von Christine Jasch im Auftrag des Österreichischen Bundesministeriums für Verkehr, Innovation und Technik, des Bundesministeriums für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, sowie von der Bundeswirtschaftskammer erstellt. Sie ist mittlerweile in 12 Sprachen übersetzt, wird weltweit angewendet und bildet auch die Basis für die vorliegende IFAC Leitlinie zur Umweltkostenrechnung. Die praktische Anwendung wurde unter anderem in Pilotprojekten in Österreich im Rahmen des Impulsprogramms Nachhaltig Wirtschaft getestet.

### **June 2006**

#### **Stand der Diskussion zu CSR in Österreich, Europa und International, Roman Mesicek, respACT**

Roman Mesicek stellte in seiner Präsentation dar, wie das Handeln von Unternehmen mit Nachhaltigkeit zusammenhängt. Im Mittelpunkt des Vortrags stand CSR (Corporate Social Responsibility), ein Konzept, das den Unternehmen als Grundlage dient, auf freiwilliger Basis soziale Belange und Umweltbelange in ihre Unternehmenstätigkeit und in die Wechselbeziehungen mit den Stakeholdern zu integrieren.

Roman Mesicek ist Geschäftsführer von respACT austria, dem Verein zur Förderung gesellschaftlicher Verantwortung von und in Unternehmen.

### **November 2006**

#### **From Knowledge to Action, Peter Moll, Ute Zander, Zentrum für Entwicklungsfragen, Universität Bonn**

A research and consultancy project funded by the German Federal Ministry of Education and Research (BMBF) recently led to a state of the art report on bridging the gap between science and possible implementation of its results in Global Change Research. In Europe, South and Mid-East Africa, the USA and Canada some 70 practitioners from science, business, politics and in NGOs have been consulted on steps forward in the difficult area of the interface between theory and practice. A book summing up the results of this project came out in September 2006 (Peter Moll/ Ute Zander, Managing, the Interface, oekom: Munich, 2006).

The focus of the lecture was in particular on the different challenges for communication and involvement and on forms of knowledge needed for implementation-oriented science. Inter- and transdisciplinarity are far from being established. However, implementation and "action" particularly in the problem area of global change require a form of research and communication of results that in fact are inter- and transdisciplinary. Respective methods, procedures and instruments for implementation-orientation have thus to be developed "in parallel" to the (basic / application-oriented) scientific knowledge. These developments will take many more years to really settle down within science as the rewards system for scientists runs counter to such efforts and the necessary policy and funding frameworks are not established. In such a situation, what could be ways forward in the meantime? What could be "intermediate strategies" to be able to deal with contractions and impediments involved?

#### **Nachhaltige Konsum- und Produktionsmuster, Sylvia Lorek, SERI Deutschland**

Nachhaltige Konsum- und Produktionsmuster, diese sperrige Floskel gewinnt seit der Johannesburg-Konferenz verstärkt Aufmerksamkeit. Im so genannten "Marrakech Prozess" erarbeiten Vertreter von Regierungen, NGO's und Wissenschaft die Grundlage für einen "10 Jahres Rahmenplan", der spätestens 2012 (Rio +20) verbindlich verabschiedet werden soll. In Europa hat die Entwicklung eines Aktionsplanes für SCP, wie es genannt wird, Eingang in die Nachhaltigkeitsstrategie gefunden. Auf nationaler Ebene haben die ersten Regierungen einen solchen Aktionsplan bereits aufgestellt, mehr

oder weniger ambitioniert und mit mehr oder weniger Einbindung der engagierten Interessensgruppen. In dem Brownbag wurden die Notwendigkeiten und Fallstricke dieser Prozesse skizziert.

Schwerpunkt des Vortrags lag auf einem Projekt SCOPE, das SERI im Auftrag von DG Environment durchführt.

Sylvia Lorek ist SERI Vice President and Head of Sustainable Consumption Research.

### ***December 2006***

#### **New projects at SERI GmbH**

In this brownbag a series of new projects was presented by SERI staff in the Vienna Office.

For further information on the Brownbag seminar series please contact Lisa Bohunovsky ([lisa.bohunovsky@seri.at](mailto:lisa.bohunovsky@seri.at)).

# Communication & Teaching

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## *Websites und sonstige Initiativen*



www.materialflows.net: the online portal for material flow data

[www.materialflows.net](http://www.materialflows.net) is an online portal for material flow data, providing links and access to material flow data sets on the national level. The website is maintained by the Sustainable Europe Research Institute (SERI), and supported by the Austrian Ministry of Agriculture, Forestry, Environment and Water Management.

www.materialflows.net provides background information on the method of material flow accounting and the policy relevance of material flows and resource use, illustrations of world-wide trends of natural resource use, and links to download various MFA data sets on the national and international level.

For more information, please contact Stefan Giljum ([Stefan.Giljum@seri.at](mailto:Stefan.Giljum@seri.at)).

## *Webpage "www.energiemodell.at" launched*

The webpage [www.energiemodell.at](http://www.energiemodell.at) was launched in spring 2006. It provides the news and results of the project "Modelling sustainable energy scenarios, supported by the Austrian Federal Ministry for Transport, Infrastructure and Technology in the research programm "Energy systems of tomorrow".



## *SERI teaching at BOKU, Vienna*

Friedrich Hinterberger, Stefan Giljum and Ines Omann are teaching two courses on sustainable development at the University of Natural Resources and Applied Life Sciences, Vienna. The courses include a general introduction into the field of sustainable development ("Nachhaltige Entwicklung I") and evaluation of Sustainable Development ("Bewertung nachhaltiger Entwicklung"). See [www.seri.at/BOKU](http://www.seri.at/BOKU).

# SERI @ the media ([www.seri.at/press](http://www.seri.at/press))

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Universum No. 39, September 2006

## Wie viele Planeten hätten's denn gern?

A study by the London-based think tank the New Economics Foundation calculated the days in a typical calendar year when various countries begin to reach beyond their environmental means and come to rely on the rest of the world. For Austria ecological debt starts to kick in by the 1st October. In the article, Stefan Giljum discusses the concept of the 'ecological rucksack', one method of calculating our ecological impact.

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Glocalist Magazin, No. 12 (2006)

Friedrich Hinterberger considers how we can combine sustainability, social responsibility and greater democracy together with three other experts from the field.

## Ein Round Table zum Thema Nachhaltigkeit

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News, Nr. 42 (2006)

## ÖKOLOGISCHES DEFIZIT. Die Menschheit überzieht das biologische 'Konto' der Erde bereits um 25 Prozent.

"Ecological deficit. Humans overdraw the biological "account" of the earth by 25%." On average, someone from the industrialised world will consume ten times the amount of resources than her African counterpart. Stefan Giljum contributes to this article by explaining the merits of the ecological footprint concept.

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Planet Magazin, No. 45 (2006)

Will infinite consumption bring us infinite contentment? Do current measures of prosperity take ecological burdens into account? In his article, Friedrich Hinterberger talks about the necessity of integrating alternative ways of measuring wealth and happiness into individual lives, economics and politics.

## für eine kultur der nachhaltigkeit

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## (Un)ermesslich

Glücksforschung – jetzt auch in Österreich

Umwelt & Bildung, No. 4 (2006)

A science of happiness? Friedrich Hinterberger reflects on what makes us happy, how we can measure it, and recent developments in the field in Austria.

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Oberösterreichischer Nachrichten, 18th November, 2006

In a comment piece for the Lower Austrian News, Friedrich Hinterberger maintains that industrialised countries must take the majority of the responsibility for global warming.

## (Un)verantwortlich!

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AGENDA-Newsletter, Nr. 1 (2006)

Current demands dictate that goods should be produced in those countries which offer the lowest costs. But what are the advantages of producing locally? Friedrich Hinterberger believes that local/regional economies cannot only reduce our strain on the environment, but also promote more personal relationships between the producer and consumer.

The articles can be downloaded in pdf from [www.seri.at/press](http://www.seri.at/press).

# Publications ([www.seri.at/publications](http://www.seri.at/publications))

## SERI Studies

## SERI Studies

SERI Studies is a series of in-depth reports from our projects.

The papers can be downloaded at [www.seri.at/publications](http://www.seri.at/publications).

SERI Studies No. 5:

**Ingrid Kaltenecker, Barbara Hammerl, Christine Jasch, Mark Hammer, Friedrich Hinterberger, Wolfgang Wimmer, Rainer Pamminer: Strengthening the market for sustainable Product Service Systems (PSS). Wien.**

The transition from purchase of products to the supply of sustainable Product-Service-Systems (PSS) is expected to be a fundamental contribution to a more sustainable development (not only in the sense of the reduction of material flows by factor 10 but also in reference to a higher quality of life and to a competitive advantage). It is a fact that this paradigm shift - from the sale of products to the supply of solutions for the satisfaction of needs – has not yet become reality. This paper draws on a project carried out in Austria that tackles the problem of how to implement Product-Service-Systems (PSS) in industry. The project aims at strengthening the market for sustainable Product-Service-Systems by clearly identifying success factors and hindrances. Restraining factors and framework conditions are worked out on the basis of international good-practice examples and pilot projects.

## SERI Background Papers

## SERI Background Papers

SERI Background Paper No. 8:

**Anna Schreuer (ed.) (2006): Reduktion des Ressourcenverbrauchs: Von der Vision zur Praxis. Mit Beiträgen von Arno Behrens, Stefan Giljum, Mark Hammer, Friedrich Hinterberger und Sylvia Lorek. Wien. (in German)**

Die Erhöhung der Ressourceneffizienz und die Verringerung des Verbrauchs an Material, Energie (und auch Fläche) ist eine zentrale Strategie zur Minderung von negativen Umweltfolgen von Produktion und Konsum. Die steigende wirtschaftliche und politische Bedeutung dieses Themas für Österreich und Europa wird sowohl durch aktuelle Initiativen zu einem nachhaltigeren Umgang mit natürlichen Ressourcen, als auch durch Diskussionen um den globalen Verbrauch natürlicher Ressourcen, ihrer Verteilung und den mit Ressourcenverbrauch verbundenen Kosten und Abhängigkeiten deutlich.

Dieses SERI Hintergrundpapier fasst den gegenwärtigen Stand der Debatten um eine Reduktion des Ressourcenverbrauchs zusammen. Wir beschreiben die Bedeutung der Stoffströme für menschliche Gesellschaften und präsentieren gegenwärtige Trends im Ressourcenverbrauch. Wir zeigen die zunehmende Europäische und internationale Bedeutung dieser Themen auf und stellen zentrale Politikprozesse für ein nachhaltigeres Ressourcenmanagement vor. Es wird eine Auswahl von anschaulichen Beispielen geliefert, wie sich die Einsparung von Material und Energie für Unternehmen wirtschaftlich auszahlt, während gleichzeitig ein Beitrag zu einem schonenderen Umgang mit der Umwelt geleistet wird. Schließlich skizzieren wir, welche konkreten Politikmaßnahmen geeignet sind, zu einer substantiellen Reduktion des Ressourcenverbrauchs beizutragen.

SERI Background Paper No. 9:

**Hinteregger E., 2006. Organic food in Austria: Production and Consumption Patterns.**

“According to the European Environmental Agency (2005) approximately one third of total environmental impact from households can be related to food and drink consumption” (EEA, 2005).“ The project ‘Sustainable Food Consumption in Austria: Trends and Options (Acronym: Sufo:trop)’ focuses on food consumption patterns in Austria, and by relating them to economic data from households, it makes policy recommendations related to sustainable food consumption. The overall objectives of the project are to contribute to a transition to a more sustainable food consumption in

Austria through an improved understanding of food consumption patterns and trends and their direct environmental impacts. Policy recommendations will be based on detailed analysis of trends and patterns, as well as dialogue with stakeholders.

Sustainability in food consumption is quite a large area, and this paper only discusses one particular sector, that of organic food. The focus is thus on the area of organic farming, marketing and consumption in Austria. This paper argues that the patterns of organic food production, marketing and consumption are characterized by a direction change from a very specialized, ideological niche to a more commercial, but also more accessible sector of the food market.

Background Paper No. 10:

**Jordis Grimm (2006). Ergebnisse der Glücksforschung und was Regionen davon lernen können. (in German)**

This background paper discusses happiness as an economic concept. First, it illustrates how to measure happiness and then it deals with various variables of the happiness equation. Income explains different levels of happiness only insufficiently, which is demonstrated in the first section. Thus, the second section introduces further variables such as (un)employment, health, social relations, heredity, democracy and governance, and environment and pollution. The last section summarizes how far happiness is integrated into policy concepts in various regions. Finally, the author judges the risks and opportunities of a policy orientation towards happiness.

SERI Background Paper 11:

**Stocker, A. (2006). Sustainability models: Aims, requirements, and applications.**

Successful and effective sustainability policies must be aligned at clear political directives, whose observance can be measured and examined. Thereby, it is crucial to know, which economic (e.g. on economic growth, budget deficit, interest rate), environmental (e.g. on resource use and environmental quality) and social effects (e.g. on employment and income distribution) different suggested measures will presumably have in order to derive the best-suited mix of different policy instruments.

Sustainability models represent effective tools for the measurement of the effects of policy measures. They assist political decision makers in their choice of suitable instruments and measures, by considering and quantifying conflicting aims between the different dimensions of sustainable development within one consistent framework. This paper describes the benefits of sustainability models and discusses some requirements that a model should satisfy for being able to properly evaluate sustainability strategies.

## The SERI Book

Jäger, Jill (2007). Was verträgt unsere Erde noch? Wege in die Nachhaltigkeit. In Zusammenarbeit mit Lisa Bohunovsky, Stefan Giljum, Friedrich Hinterberger, Ines Omann und Doris Schnepf. Hg. von Klaus Wiegandt. Fischer Taschenbuch Verlag, Frankfurt am Main



This SERI book illustrates the complexities of global change, the implications of overuse of natural resources, visions of a more sustainable future and some of the ways forward.

In April 2005, Klaus Wiegandt from the German Foundation "Forum für Verantwortung" (Forum for Responsibility) visited Vienna to discuss his ambitious project to produce a series of books about the future of our planet. His vision was to explain to the educated lay public the problems of global change and the urgent need to take action, as well as provide guidance on the way forward.

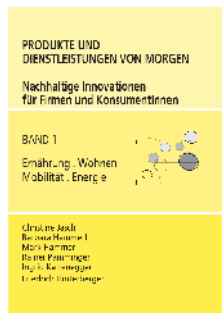
He was looking for someone to write the first volume of the book series, in which the complexities of global change would be presented together with an introduction to the topic of sustainability. Jill Jäger agreed to write the book as part of her work at SERI. Very quickly the book became a joint project to which Lisa Bohunovsky, Stefan Giljum, Friedrich Hinterberger, Ines Omann and Doris Schnepf contributed. There were many discussions within the team about the content of the five chapters of the book, drafts were shared, debated and the final product took shape. The result shows the depth and breadth of

knowledge within the SERI team on issues such as global change, resource use, the economy, and sustainable development visions and pathways.

The book begins by presenting 10 questions and answers as a guide to the content of the book – "What kind of a future do we want?", "Is the situation really so dramatic, or do we have time to deal with it?", "Why do the industrialized countries need to reduce their resource use?", "What can we do?". These are some of the questions that are asked and answered. The other five chapters then go into detail on these issues, explaining the complexities of global change, the urgency of the problems, the need for a more equitable distribution of resource use, the roles that improved efficiency of resource and energy use could play, the important role that lifestyle changes will play in reaching sustainable pathways, and the steps that a wide range of decision-makers as well as individuals could take to avoid an unsustainable future.



## Book



**Jasch, Christine, Barbara Hammerl, Mark Hammer, Rainer Pamminger, Ingrid Kaltenecker, Friedrich Hinterberger (2006). Produkte und Dienstleistungen von morgen. Nachhaltige Innovationen für Firmen und KonsumentInnen. Books on Demand, Norderstedt.**

In two volumes.

Volume 1: Ernährung, Wohnen, Mobilität, Energie.

ISBN-10: 3-8334-5341-9 / ISBN-13: 978-3-8334-5341-0

Volume 2: Chemie, Reinigung, Maschinen, Recycling.

ISBN-10: 3-8334-6173-X / ISBN-13: 978-3-8334-6173-6

Produkt-Servicesystems (PSS) are often mentioned as important innovations and business strategies for sustainable development. The book analyses possibilities and restrictions of the contribution of PSS to sustainable development. The book presents a sustainability evaluation for more than 100 case studies in 8 different business-to-business and business-to-costumer demand areas. It helps companies with advice for the development of sustainable innovations and gives an overview to policy makers how increases in eco-efficiency through service solutions can be supported.

## Book sections

**Eisenmenger, Nina and Stefan Giljum (2006). Evidence from Societal Metabolism Studies for Ecological Unequal Trade. In: Hornborg, Alf and Carole L. Crumley, (Eds.). The World System and The Earth System. Global Socio-Environmental Change and Sustainability Since the Neolithic. Left Coast Press Inc. Walnut Creek, California. pp. 288-302**

Abstract: Since the 1990s the concept of societal metabolism has gained broad acceptance within the scientific community as a framework for analyzing society-nature interactions. The analytical tool used to operationalize the concept, material flow accounts, calculates the biophysical exchange relationships of a socio-economic system, usually a nation state, with its natural environment. World-system theory, on the other hand, deals with global social change and the interaction between nations. It is concerned with the historical development of the world-economy and its political and economic structures and processes. In this chapter we first briefly present the concept of societal metabolism, with special focus on international material flows. Second, we discuss some aspects of world-system theory, especially the global division of labor and unequal trade between cores and peripheries, and how they can be linked to material flow accounts. Thirdly, we present material flow accounts of industrialized as well as developing countries, with a special focus on biophysical trade flows. Economic structures and processes assumed by world-system theory, such as unequal trade or the establishment of a division of labor, can thus be substantiated with a biophysical account of these features. Finally, we ask whether biophysical flows provide a complementary picture of unequal trade and other processes identified by world-system theory.

More information on this book at: <http://www.lcoastpress.com/book.php?id=32>

**Giljum, Stefan (2006). Material flow-based indicators for evaluation of eco-efficiency and dematerialisation policies. In: Lawn, Philip (Ed.). Sustainability indicators in Ecological Economics. Edward Elgar. Cheltenham. pp. 376-398.**

This chapter argues that new approaches to environmental governance must take a systemic view of the economy-environment relationship recognising that current environmental problems are to a large extent the consequence of the overall scale of anthropogenic resource use. Any monitoring of eco-efficiency policies therefore requires appropriate information on the relationship between socio-economic activities and their subsequent environmental impacts. Economy-wide material flow accounting and analysis (MFA) is presented as an accounting framework, which facilitates the compilation of consistent databases for policy-oriented analyses of economy-environment interactions. The chapter presents selected examples to reveal how the MFA approach and derived material flow indicators can be used for the evaluation of sustainability-oriented policies. Finally, the chapter discusses the main deficiencies of the MFA approach and introduces possible extensions to the current MFA framework to overcome them.



**Hammer, Mark, Friedrich Hinterberger, Ines Omann and Andrea Stocker (2005). From micro to macro: eco-efficiency from the economic point of view. In: Sergienko, O and Holger Rohn (Eds.). Basics of the eco-efficiency theory, pp. 121-149. (In Russian).**

The article gives an overview of eco-efficiency issues on various economic levels. It starts on the micro level, introducing eco-efficiency concepts for products and companies. Here it also presents an overview of the possible contributions of product service systems to sustainable development and increased eco-efficiency. One chapter takes a look at implications of eco-efficiency on the regional and sectoral level.

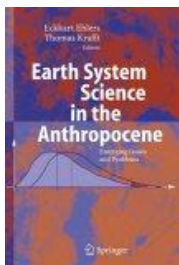
Another section focuses on the macroeconomic level and discusses the interrelations between macroeconomic policy and new models of work, a description of the rebound effect and it links the issues of work, unemployment and ecology and shows how these issues could be solved altogether in a sustainable way. It also discusses the possibilities of a material input tax in this context. The article concludes with the introduction of measures and instruments for an ecological economic policy.



**Hinterberger, Friedrich, Harald Hutterer und Doris Schnepf (2006). Soziales Kapital, individuelles Glück und die Verantwortung der Unternehmen. In: Gehmacher, Ernst, Sigrid Kroismayr, Josef Neumüller, Martina Schuster (Hg.): Sozialkapital. Neue Zugänge zu gesellschaftlichen Kräften. Wien: Mandelbaum-Verlag. 2006**

In a new book on Social Capital, edited by Ernst Gehmacher and colleagues, Friedrich Hinterberger, Doris Schnepf and Harald Hutterer describe the links between material wealth, interpersonal relations, employment and happiness. The article is in German language; several other contributions in the book are, however, in English.

"Das Glück eines Menschen wird von einer Reihe von Faktoren bestimmt, die miteinander komplex verbunden sind. Materieller Wohlstand ist, sofern die Grund- Bedürfnisse befriedigt sind, im Vergleich zu sozialen Faktoren von untergeordneter Bedeutung. Andere wichtige Faktoren sind der eigene Selbstwert sowie die Beziehungen zu anderen, also: Sozialkapital! Immer intensivere und längere Erwerbsarbeitszeiten hindern aber viele daran, sich ausreichend um diese Aspekte des Glücks zu kümmern. Es liegt daher in der Verantwortung von ArbeitnehmerInnen und ArbeitgeberInnen, der Nicht-Erwerbsarbeit einen genügend großen Raum im Leben einzuräumen."



**Jäger, Jill (2006). Sustainability Science. In: Ehlers, Eckart and Thomas Krafft (Eds.). Earth System Science in the Anthropocene: Emerging Issues and Problems. Springer. Berlin. pp. 19-26**

This chapter discusses the challenges of sustainability science and the need for a new contract between science and society and its importance for enhancing the role of science and technology in transitions to sustainable development. The chapter is based on the outputs of a workshop in October 2000 and a Synthesis Workshop held in Mexico City in May 2002.

**Kok, Marcel T.J., V Narain, Steven Wonink, and Jill Jäger (2006). Human vulnerability to environmental change: An approach for UNEP's Global Environmental Outlook (GEO). In, Jörn Birkmann (Ed.), Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies. United Nations University Press, Tokyo. pp. 128-148**

In a new book entitled "Measuring Vulnerability to Hazards of Natural Origin - Towards Disaster Resilient Societies", Jill Jäger (SERI) has co-authored a chapter together with Marcel Kok, Vishal Narain and Steven Wonink on "Human Vulnerability to Environmental Change: An Approach for UNEP's Global Environmental Outlook". The book, which was edited by Jörn Birkmann at the United Nations University Institute for Environment and Human Security in Bonn, Germany, provides a compilation of state-of-the-art vulnerability assessment approaches and presents concrete examples from Africa, Asia, the Americas and Europe.

For further information see <http://www.seri.at/documentupload/pdf/vulnerabilitynaturalhazards.pdf>.

**Spangenberg, Joachim H. (2006). Society and its products. In: Zbicinski, Ireneusz, John Stavenuiter, Barbara Kozłowska and H.P.M. van de Coevering (Eds.). Product Design and Life Cycle Assessment. Baltic University Press. Uppsala. pp. 17-28.**

The paper describes the multiple roles of products and their consumption in affluent societies and warns against oversimplification in deriving policies for sustainable consumption.

**Spangenberg, Joachim H. (2006). Nachhaltigkeitsdiskurse. Das HGF-Konzept als Verständigungsbasis nutzen. In: Jürgen Kopfmüller (Ed.). Ein Konzept auf dem Prüfstand. Das integrative Nachhaltigkeitskonzept in der Forschungspraxis. edition sigma. Berlin. pp 83-98.** Against the background of the largest sustainability research project ever conducted in Europe, the paper criticises the neglect of economic sustainability aspects, but identifies the project as a suitable basis for integrative discourses for the future development of sustainability strategies (in German only).

**Spangenberg, Joachim H. (2006). Sustainable Development – A Challenge to Governance. Lars Ryden (Ed.). Realising a Common Vision for a Baltic Sea Eco-Region. Baltic University Press. Uppsala. pp. 13-20.**

Based on the results of the NSDS Evaluation Handbook project, this paper describes the governance challenges identified and points to approaches to overcome them, but also to the difficulties involved in this endeavour.

**Spangenberg, Joachim H. and Martin O'Connor (2006). La ciencia de la sostenibilidad en el Espacio de Investigación Europeo: descripciones, definiciones y retos. In: Jorge Riechmann (Ed.), Perdurar en un planeta habitable. CIMA (Científicos por el Medio Ambiente), Madrid.**

The paper – based on results of the Sustrat research project – critically discusses the current EU research policies, and argues both historically and politically that a new approach to research is necessary to deal with the post-normal challenges of sustainability science and politics.

**Stocker, Andrea, Friedrich Hinterberger und Sophie Strasser (2006). Mischarbeit und das Konzept der Halbtagsgesellschaft in: Hartard, Susanne, Schaffer und Carsten Stahmer (Hg.). 2006. Die Halbtagsgesellschaft. Konkrete Utopie für eine zukunftsfähige Gesellschaft. Nomos, Baden-Baden. pp. 77-84**

Die Verteilung der Arbeit nimmt im Konzept der Halbtagsgesellschaft (HTGS) eine Schlüsselfunktion ein. Dabei geht es nicht nur um die Verteilung der beruflichen sondern auch der unbezahlten Arbeit. Beide Formen der Arbeit tragen gleichermaßen zum Funktionieren einer Gesellschaft bei – werden aber bis heute unterschiedlich auf Männer und Frauen verteilt. Während Männer immer noch die Erwerbsarbeit dominieren, bewerkstelligen Frauen einen Großteil der unbezahlten (und zumeist weniger wertgeschätzten) Arbeit.

Dieses Kapitel diskutiert zukünftige Arbeitsformen und geht dabei insbesondere auf das Konzept der Mischarbeit ein. Dieses sieht, wie auch das Konzept der HTGS, eine Umverteilung der beruflichen und der unbezahlten Arbeit vor. Von besonderem Interesse sind dabei die Anreizstrukturen, die eine Umsetzung des Mischarbeitskonzeptes fördern (Grundsicherung, negative Einkommensteuer etc.) sowie der erwartete Mehrwert an Lebensqualität.

**"Ökologische Wirtschaftspolitik" published in Chinese**

10 years after its publication in German, "Ökologische Wirtschaftspolitik" (Ecological economic policy) is now available in Chinese, published by "University of Finance and Economics Press". See [www.dufep.cn/books\\_detail.asp?id=978a](http://www.dufep.cn/books_detail.asp?id=978a).

## Journal articles

**Hammer, Mark, Stefan Giljum, Fred Luks und Mathias Winkler (2006). Die ökologische Nachhaltigkeit regionaler Metabolismen: Materialflussanalysen der Regionen Hamburg, Wien und Leipzig. Natur und Kultur, Jahrgang 7 / Heft 2. pp. 62-78.**

The article presents results of the material flow analysis carried out in our project NEDS (Nachhaltige Entwicklung zwischen Durchfluss und Symbolik). The paper describes the material consumption in the regions of Hamburg and Leipzig for the years 1992-2001 and for the region of Vienna for the years 1995-2003. Applying the method of material flow analysis, the total consumption of materials has been accounted for and put into relation to economic development. Indicators of material consumption serve as measures for ecological sustainability. The description of the relation to economic development

allows conclusions concerning the material intensity of the economy and its eco-efficiency. The paper discusses the methodological problems in accounting regional material flows, illustrates the implications of material flows for land use, and formulates improvements for regional statistics to develop sustainability indicators on a regional level. For further information see [www.seri.at/neds](http://www.seri.at/neds) or [www.neds-projekt.de](http://www.neds-projekt.de).

**Rodrigues, Joao, Tiago Domingos, Stefan Giljum and Francoise Schneider (2006). Designing an indicator of environmental responsibility. Ecological Economics 59 (3). pp 256-266.**

Abstract: When an environmental problem involves several agents, different environmental indicators can be chosen. In this paper we derive axiomatically an indicator of "environmental responsibility", the quantitative contribution of each agent to the environmental problem. This indicator must possess properties that most agents are likely to accept. Apart from a normalization condition, that indicator must be: (1) additive, implying that the responsibility of a set of agents is the sum of the responsibilities of each agent; (2) account for indirect effects under economic causality, implying that the agent that benefits economically from an environmental damage is responsible for it; (3) monotonic in direct environmental pressure, implying that the responsibility of a given agent cannot decrease if its actions lead to an overall worsening of the environmental problem; (4) symmetric in production and consumption, meaning that if the contribution of an agent's consumption and production behavior is interchanged, that agent's responsibility cannot change. We prove that an indicator fulfilling these properties exists and is unique, given by the average of the environmental pressure generated to produce the primary inputs and the final demand of an agent. The existence of a unique indicator of environmental responsibility can facilitate cooperation in environmental agreements and raise commitment in the implementation of environmental policies.

**Tukker, Arnold; Maurie C.Cohen, Uchita de Zoysa, Edgar Hertwich, Patrick Hofstetter, Atsushi Inaba, Sylvia Lorek and Eivind Stø (2006). Oslo Declaration on Sustainable Consumption. Journal of Industrial Ecology 10(1-2). pp. 9-14.**

In accordance with the commitment expressed in Agenda 21 to develop a better understanding of the role of consumption and how to bring about more sustainable consumption patterns, over 250 research declared their commitment to generate knowledge about how to move toward a more sustainable global future.

## *Other articles and publications*

**Giljum, Stefan, Friedrich Hinterberger, Mathis Wackernagel and Justin Kitzes (2006). Resource use indicators in the European Union. Policy processes, indicator sets and criteria for a headline indicator. Aachen Foundation Kathy Beys. Aachen, Germany.**

**Hammer, Mark and Stefan Giljum (2006). Materialflussanalysen der Regionen Hamburg, Wien und Leipzig. NEDS Working Paper No 6, Hamburg.**

The results from regional material flow analysis for the regions of Vienna, Hamburg and Leipzig which we compiled in the project NEDS - Nachhaltige Entwicklung zwischen Durchsatz und Symbolik (Sustainable Development Between Throughput and Symbolism) have been published as NEDS working paper No. 6 and are available for download at [www.neds-projekt.de/Download/download.html](http://www.neds-projekt.de/Download/download.html). Further information: [www.seri.at/neds](http://www.seri.at/neds) and [www.neds-projekt.de](http://www.neds-projekt.de).

**Hinterberger, Friedrich (2006). Für eine Kultur der Nachhaltigkeit. in: „planet“. Zeitung für politische Ökologie der Grünen Österreich. No 47.**

Die globale Umwelt ist von einer Vielzahl von Veränderungen bedroht, die letztlich den Wohlstand der Menschen gefährden. Dieser Wohlstand ist international, aber auch innerhalb unserer Gesellschaft sehr ungleich verteilt. Ist das die Zukunft, die wir wollen? Oder geht es auch anders?

<http://www.planet.gruene.at/index.php?seite=themen&tid=42842>

**Hinterberger, Friedrich; Mark Hammer, Christine Jasch, Gabriele Hrauda, Barbara Hammerl, Ingrid Kaltenecker, Wolfgang Wimmer and Rainer Pamminer (2006). Leuchttürme für**

**industrielle Produkt-Dienstleistungssysteme. Potentialerhebung in Europa und Anwendbarkeit in Österreich.**

Nachhaltig wirtschaften konkret, Berichte aus Energie- und Umweltforschung 15/2006. Bundesministerium für Verkehr, Innovation und Technologie (BMVIT), Vienna. (Best-practice Examples of Industrial Product Service Systems. Potentials in Europe and Applicability in Austria).

**Rocholl, Martin, Stefan Giljum and Kai Schlegelmilch (2006). Factor X and the EU: How to make Europe the most resource and energy efficient economy in the world. A guidebook to policies and legislative initiatives within the European Union. Aachen Foundation Kathy Beys. Aachen, Germany.**

A review of policies and legislative initiatives of the EU which could contribute to increasing the energy and resource efficiency of the European Union. In cooperation with the Aachen Foundation.

The study can be ordered from [schrooten@aachener-stiftung.de](mailto:schrooten@aachener-stiftung.de) or downloaded from [www.aachener-stiftung.de/cms.php?id=312](http://www.aachener-stiftung.de/cms.php?id=312). The summary "Europe must become the world champion in energy and resource efficiency!" can be downloaded from [http://www.gruene-bag.de/cms/default/dokbin/157/157881.resource\\_and\\_energy\\_efficiency\\_in\\_europe.pdf](http://www.gruene-bag.de/cms/default/dokbin/157/157881.resource_and_energy_efficiency_in_europe.pdf).

**Spangenberg, Joachim H. (2006). Structural Indicators: Towards systemic structures as the basis for future EU policies. Eurostat News, 2005 Edition. Office for Official Publications of the European Communities. Luxembourg. pp 143-163.**

The paper points to the different challenge posed by the development of integrated systems of sustainability indicators as opposed to deriving individual indicators, and to the changing policy context with increasing uncertainty. It introduces a systematic approach to derive policy relevant sustainability indicators by using a Pressure-Policy-Matrix PPM.

**Spangenberg, Joachim H. (2005). Das Richtige über das Wichtige wissen. Wissenschaft und Frieden 3/05. pp. 19-23**

To commemorate the 50th anniversary of Albert Einstein's death, the German journal W&F (Science and Peace) has published a special issue 3/2005. The paper focuses on sustainability science as a challenge to the system of science (in German only).

**Wiedmann, Thomas, Mirko Moro, Mark Hammer and John Barrett (2005). National and Regional Physical Accounts (Material Flows) for the United Kingdom. REAP Report No4. Stockholm Environment Institute, York.**

This report – the fourth in the REAP Report series from the Ecological Budget UK project – describes the methodology that was used to compile national and regional material flow accounts. For the first time, a complete account of material supply and demand is presented for all commodity groups (economic sectors) and all Government Office Regions in the UK. While this document describes the methodological approach, the accompanying spreadsheets with regional mass balance tables are available as an e-Appendix under [www.ecologicalbudget.org.uk](http://www.ecologicalbudget.org.uk).

download at:

[http://www.seri.at/index.php?option=com\\_docman&task=doc\\_download&gid=71&Itemid=39](http://www.seri.at/index.php?option=com_docman&task=doc_download&gid=71&Itemid=39).

## Conference papers

For information on papers presented at conferences and workshops see the next section "Presentations at workshops and conferences" in this annual report.

## Films

### "The Planet"

The Swedish television company has shown the four-part documentary film "The Planet", which was inspired by the book "Global Change and The Earth System: a Planet under Pressure" published in 2004, based on a 10-year synthesis of the work of the international global change research programmes. The film rights have now been sold to around 50 other television stations worldwide, for showing in early 2007. You can see and hear the interviews with Jill Jäger, with links to the interviews with other global change scientists, at

[http://svt.se/svt/jsp/Crosslink.jsp?d=55880&lid=puff\\_676857&lpos=extra\\_5](http://svt.se/svt/jsp/Crosslink.jsp?d=55880&lid=puff_676857&lpos=extra_5).

# Presentations at workshops and conferences

Conference	from (MM/TT)	to (MM/TT)	Presentators (Co-Authors)	Title of presentation	contact	Download
Impulse für Landwirtschaft & Ernährung; Berlin, BMBF	01/17	01/18	Sylvia Lorek	Gastkommentar: Der "mündige" Verbraucher - Welche Rolle spielen Information und Kommunikation	<a href="mailto:sylvia.lorek@seri.de">sylvia.lorek@seri.de</a>	
9 <sup>th</sup> Symposium Energieinnovation, Graz	02/15	02/17	Lisa Bohunovsky & Martin Bruckner (Omann, I., Madlener, R., Stagl, S.)	Integrierte Nachhaltigkeitsbewertung von Energieszenarien. Eine lokale Fallstudie im Projekt ARTEMIS	<a href="mailto:lisa.bohunovsky@seri.at">lisa.bohunovsky@seri.at</a>	<a href="http://www.project-artemis.net/docs.html">http://www.project-artemis.net/docs.html</a>
A resource strategy for Germany, Berlin, organised by the Aachen Foundation Kathy Beys, Aachen	04/04		Stefan Giljum	Ressourcenstrategie. Beispiele für Politikmaßnahmen auf nationaler und europäischer Ebene	<a href="mailto:stefan.giljum@seri.at">stefan.giljum@seri.at</a>	
alternative ECOFIN, attac et al, Vienna	04/05		Friedrich Hinterberger	Welche Wirtschaft braucht das Glück? Strategie für ein wettbewerbsfähiges Europa in seinen natürlichen Grenzen	<a href="mailto:friedrich.hinterberger@seri.at">friedrich.hinterberger@seri.at</a>	<a href="http://www.seri.at/index.php?option=com_content&amp;task=view&amp;id=58&amp;Itemid=308">http://www.seri.at/index.php?option=com_content&amp;task=view&amp;id=58&amp;Itemid=308</a>
"Future talks", Salzburg	04/06		Friedrich Hinterberger	Erneuerbare Zukunft. Strategien für eine radikale Wende zur nachhaltigen Gesellschaft	<a href="mailto:friedrich.hinterberger@seri.at">friedrich.hinterberger@seri.at</a>	
12th Annual International Sustainable Development Research Conference, Hong Kong, PR China	04/06	4/8	Joachim H. Spangenberg	Sustainable Development in a Globalising World. European Approaches and Experiences: A Survey	<a href="mailto:Joachim.Spangenberg@gmx.de">Joachim.Spangenberg@gmx.de</a>	
Workshop of Lake Balaton Integrated Vulnerability Assessment and Adaptation Strategies project	06/02	06/03	Jill Jäger	Vulnerability Assessment	<a href="mailto:Jill.jaeger@seri.at">Jill.jaeger@seri.at</a>	
Participatory Approaches in Science & Technology (PATH)	06/04	06/07	Ines Omann, Katharina Kowalski (Bohunovsky, L., Madlener, R.,	The influence of social preferences on the multi-criteria evaluation of	<a href="mailto:Ines.omann@seri.at">Ines.omann@seri.at</a>	<a href="http://www.macaulay">http://www.macaulay</a>

Conference	from (MM/TT)	to (MM/TT)	Presentators (Co-Authors)	Title of presentation	contact	Download
Conference, Edinburgh, Scotland.			Stagl, S.)	energy scenarios.		<a href="http://ac.uk/PAT_Hconference/">ac.uk/PAT_Hconference/</a>
ConAccount network, Vienna, IFF / Institute for Social Ecology in Vienna	09/13	09/14	Stefan Giljum	"Modelling scenarios towards a sustainable use of natural resources in Europe"	<a href="mailto:stefan.giljum@seri.at">stefan.giljum@seri.at</a>	
			Friedrich Hinterberger (Andrea Stocker, Marc Ingo Wolter)	"Modelling environmental, economic and employment effects"	<a href="mailto:friedrich.hinterberger@seri.at">friedrich.hinterberger@seri.at</a>	
Workshop „Raum ohne Hüter? Nachhaltigkeit und Verantwortung im Konzept des Umweltraums“, Berlin	10/09		Giljum, S.	Global appropriation of environmental space. Past trends and future scenarios of natural resource use in different world regions.	<a href="mailto:stefan.giljum@seri.at">stefan.giljum@seri.at</a>	<a href="http://www.seri.at/documentupload/pdf/environmental_space.pdf">http://www.seri.at/documentupload/pdf/environmental_space.pdf</a>
PEER Environmental Technology Conference, Montpellier, France	10/11	10/12	Joachim H. Spangenberg	Sustainable Consumption beyond information and education	<a href="mailto:Joachim.Spangenberg@gmx.de">Joachim.Spangenberg@gmx.de</a>	
Regio&Co Colloquium, "Mission 21" in Basel, Switzerland	10/14		Friedrich Hinterberger	Ökologische Ökonomie. Ökologische Ökonomik. Strategien für eine radikale Wende zur nachhaltigen Gesellschaft	<a href="mailto:friedrich.hinterberger@seri.at">friedrich.hinterberger@seri.at</a>	<a href="http://www.seri.at/regio&amp;co">www.seri.at/regio&amp;co</a>
Looking in to the Cristal Ball, Helsinki Municipality	11/02		Sylvia Lorek	Consumption and the Environment in Europe: Trends and Futures	<a href="mailto:sylvia.lorek@seri.de">sylvia.lorek@seri.de</a>	
Älter, weniger, weiter weg – Demografischer Wandel als Gestaltungsaufgabe für den Umweltschutz, Berlin, DNR/BUND/NABU	11/08		Sylvia Lorek	Konsum und Bedürfnisse älterer Menschen – Chancen für den Umweltschutz?	<a href="mailto:sylvia.lorek@seri.de">sylvia.lorek@seri.de</a>	
International Conference on Sustainability Measurement and Modelling, Terrassa, Spain	11/16	11/17	Joachim H. Spangenberg	Towards a European Methodology for National Sustainable Development Strategy Reviews  ALARM: Towards integrated long-term scenarios for assessing biodiversity risks and shocks, International Conference on Sustainability Measurement and Modelling	<a href="mailto:Joachim.Spangenberg@gmx.de">Joachim.Spangenberg@gmx.de</a>	
IHDP Conference „Resource	11/17	11/18	Giljum, S., Behrens, A., Hinterberger,	Modelling scenarios towards a sustainable use of natural resources in	<a href="mailto:stefan.giljum@seri.at">stefan.giljum@seri.at</a>	SERI

Conference	from (MM/TT)	to (MM/TT)	Presentators (Co-Authors)	Title of presentation	contact	Download
Policies“			F., Lutz, C., Meyer, B.	Europe.		Working Paper 4: <a href="http://www.seri.at/workingpapers">http://www.seri.at/workingpapers</a>
Launch Conference of the Sustainable Consumption Research Exchange (SCORE!) Network, Wuppertal	11/23	11/25	Sylvia Lorek & Chris Church, ANPED	Policy and Practice in Sustainable Production and Consumption - <i>An assessment of the role of NGOs</i>	<a href="mailto:sylvia.lorek@seri.de">sylvia.lorek@seri.de</a>	
Workshop on the Integrated Assessment of Climate Change Impacts and Adaptation Options, Canberra, Australia, organized by Australian Greenhouse Office	12/07	12/08	Jill Jäger	Integrated Assessment – An International Perspective Integrated Assessment: Balancing Science and Stakeholder Needs	<a href="mailto:Jill.jaeger@seri.at">Jill.jaeger@seri.at</a>	
Energy, Environment, and Development-Analysing Opportunities for Reducing Poverty, Bangalore, India, Veolia, TERI & IDDRI	12/14	12/16	Sylvia Lorek	Sustainable Lifestyles – Remarks from a European Perspective	<a href="mailto:sylvia.lorek@seri.de">sylvia.lorek@seri.de</a>	
ISEE 9th Biannual Conference, New Delhi, India	12/15	12/18	Ines Omann ( <i>Birgit Friedl, Alexandra Pack</i> )	Socio-economic drivers of (non-) sustainable food consumption. An analysis for Austria.	<a href="mailto:Ines.omann@seri.at">Ines.omann@seri.at</a>	
	12/15	12/18	Joachim H. Spangenberg Laura Maxim, Joachim H. Spangenberg	System complexity and scenario analysis Bridging the gap between two analytical frameworks	<a href="mailto:Joachim.Spangenberg@gmx.de">Joachim.Spangenberg@gmx.de</a>	



# Personalia

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## **Ines Omann new member of the ESEE Board**

The elections for new ESEE board members resulted in the appointment of six new board members: Paula Antunes, Janne Hukkinen, Roldan Muradian, Ines Omann, Unai Pasqual and Esther Velazquez. The 4 members of the previous board that stood for re-election - Sigrid Stagl, Wendy Kenyon, Tatiana Kluvánková-Oravská and Karen Refsgaard - were all re-elected. The new board officially takes over on November 15, 2006 and will work for a period of 3 years. Ines Omann is chairing the committee on publications and publicity.

For more information about the ESEE, see [www.euroecolecon.org](http://www.euroecolecon.org).

## **Doris Schnepf obtained scholarship at the Institute for Advanced Studies, Vienna**

In October Doris Schnepf started a full-time three-year postgraduate scholarship at the Institute for Advanced Studies, Department of Sociology, in Vienna. During this time, Doris Schnepf will work on her doctoral thesis named "Linking knowledge to action. Analysing transdisciplinary decision making processes in order to enhance decision making for sustainable development".

## **Friedrich Hinterberger and Joachim H. Spangenberg in the Who is Who**

Friedrich Hinterberger and Joachim H. Spangenberg have been included in the recent edition of "Who's Who in Science and Engineering" by Marquis Who's Who, USA.

## **Joachim Spangenberg moved to UFZ**

In June, Joachim H. Spangenberg became an employee of the Environmental Research Centre (UFZ) in Leipzig, where he will continue his work with the ALARM project. Although he is no longer an employee of the SERI office in Vienna, he remains, of course, the Vice President of the SERI network. His new surface mail address is: Dr. Joachim H. Spangenberg, Vorsterstr. 97-99, D-51103 Cologne, Germany. Tel +49-221-216-94, Fax -94.

In November, Joachim H. Spangenberg was nominated as a member of the IUCN Committee Ecosystem Management CEM.

## **Lisa Bohunovsky wins scholarship for Renewable Energy – MSC-programme**

Lisa Bohunovsky, researcher at SERI, started a part-time MSc-Program on "Renewable Energies in Central and Eastern Europe", which is held in cooperation of the University of Technology in Vienna and the Energiepark Bruck/Leitha. The program will last for two years and includes classes on different forms of renewable energies, including technical, managerial and juridical aspects. Lisa Bohunovsky is the winner of the scholarship granted by the Austrian newspaper "Die Presse".

## **Friedrich Hinterberger's weblog on "happy living and working"**

On the 27th August, Friedrich Hinterberger started a weblog on "happy living and working" as a new way of communicating results from our work (mainly in German). <http://fritzhinterberger.twoday.net/>.