



SERI ANNUAL REPORT 2007

contents

foreword.....3

mission statement.....4

highlights6

projects.....8

cooperation21

events23

conferences & lectures.....27

communicating the idea.....32

publications34

media.....44

Feedback welcome!

If you should have questions, points of critique or any other input in relation to our Annual Report or if you would like to know more about our work, please contact us:

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foreword

In 2007, SERI Vienna 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.



The year 2007 also brought several new projects and activities for the “Sustainable Europe Research Institute Germany e.V.” They were partly carried out together with individual members of the SERI network, partly in cooperation with SERI GmbH in Vienna.

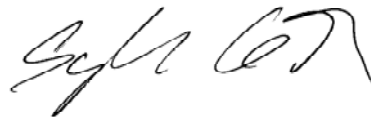
Thus the SERI society (“Verein zur Förderung eines Sustainable Europe Research Institute”) in its 8th year appears as a successful partnership of independent personalities and legal entities.



The SERI Annual Report presents an overview of the activities of SERI in 2007. We have tried to make it as concise, but also as informative as possible. If you wish to go into further detail on any subject, please refer to our website – the relevant links are indicated.



Dr Friedrich Hinterberger
President SERI Verein and
Manager SERI GmbH



Sylvia Lorek
Vice-President SERI e.V. and
Chairwoman SERI Deutschland e.V.

Vienna, February 2008

mission statement

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 sustainable development. Indicator-based policies are thus 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 Europe's 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 SERI aims to engender is supported by a webpage, conferences, meetings and publications.

The Sustainable Europe Research Institute

SERI 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 more specific themes.

Highlights are topics of major interest which we wish to communicate to the broad public. They are published at irregular intervals on our website and in the SERI InfoMail. In 2007, we featured the following topics:

The Ecological Footprint

The Ecological Footprint has proven one of the most successful indicators for communicating the concept of environmental sustainability and the physical limits of our planet. In the past decade the Ecological Footprint has developed into one of the most important measures for resource use in production and consumption at the international level and it is used by a large number of institutions for evaluating impacts of human activities on the environment. Together with international environmental organizations (Greenpeace, WWF, Friends of the Earth) and the Austrian "Plattform Footprint", SERI works on measuring and communicating the Ecological Footprint, as well as on suggestions on how to reduce this environmental consumption on individual as well as on societal (macroeconomic, European, global) scales. www.seri.at/footprint



Working for International Organizations



Since the foundation of SERI 8 years ago we have been supporting the United Nations as well as various European institutions. The launch of UNEP's "GEO-4" report end of October 2007 in New York, for which Jill Jäger co-ordinated the writing of one chapter, has in this respect certainly been the greatest success so far. Earlier activities included participation in the UN expert groups on sustainability indicators and sustainability strategy evaluation, a conference co-organized by the European Environment Agency EEA (www.eee2006.org), studies for the OECD and the EEA, two studies for the European Parliament, and our current input to the European Commission's "Beyond GDP" conference. www.seri.at/international

Measuring progress

How do we measure progress? 35 years after the first publication of the Club of Rome's "Limits to Growth", this question is still on the agenda. Or better: on the agenda again. While in the 70s and 80s of the past century concepts like "qualitative versus quantitative growth" were intensively discussed under the influence of Dennis Meadows et al., the past 20 years have rather centered around the principle of the compatibility of economic prosperity and environmental protection, with this change of trends probably being due to the fact that the appeals to dispense with economic growth at the time did not receive much approval and support in society. www.seri.at/measuringprogress





Sustainable Regions

Sustainability needs engagement on various levels. Everyone can either get active on an individual basis, or hope for (positive) top-level decisions. The region as a spatial level is repeatedly addressed in relation to sustainability. Regions are big enough to already guarantee noticeable changes; as pilot regions they may become the triggers for large-scale developments; they are of wide political scope, and their relatively low degree of structural complexity allows for easy and quick decisions. www.seri.at/regions-highlight

Education for Sustainable Development

Imaginative efforts to rethink democratic and economic life tend to fall through the nets of public attention. Yet, social and ecological indicators on resource extraction and emissions, and on unemployment and poverty, have signaled for years the need for radical social change. But while the ecological footprint metaphor that sustaining current consumption and production would require several planets has become a common-place, proposals for social change are strangely absent from public debate. This predicament of much needed yet unimaginable change is also a challenge to education. What kind of education is required for sustainability? And what kind of education hinders sustainability? www.seri.at/education-highlight



For those living in developed countries, a reliable energy supply goes without saying. Electricity simply flows out of the socket; if it gets cold we can switch on the heating, and we increasingly fly abroad for our holidays.. Energy services, such as air conditioning, heating, transport, lighting and so forth, continue to be at our disposal. And yet the question of a secure and reliable energy supply threatened by various problems and crises is increasingly occupying newspaper headlines. www.seri.at/energy-highlight

Energy

Food – for thought!

Food and drink satisfy the elementary needs of humans. Eating and drinking, however, not only provide us with enough liquids and calories, they contribute to „a good life“. The quality of food and drink is very important in this respect. Eating and drinking also contributes to social togetherness (in the family or with friends) and is a central part of business relations. However, discussions about food and drink often turn these days to negative aspects such as obesity or anorexia, which are also indicators of stress in modern society. In addition, the consumption of food and drink contributes significantly to environmental degradation. www.seri.at/food



Our projects are the main part of our work. They cover a wide range of themes and approaches, and they have different aims. Some are mainly research projects to bring forward the state of 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 www.seri.at/themes and www.seri.at/approaches.

New projects

Balaton – Lake Balaton Regional Vulnerability Assessment

09/2007 – 12/2007, Lake Balaton Development Coordination Agency (LBDCA), GRID-Geneva and other national and international partners

The overall purpose of the project was to contribute to a better understanding of the Lake Balaton ecological and socio-systems vulnerability arising from multiple forces of change.

The project was examining the prospect that, due to the constellation of local and global causes, potentially including climate change as well as the unique attributes of the lake, Lake Balaton is entering a phase of critical vulnerabilities. Going beyond the assessment of vulnerabilities, the project connected analysis to policy planning and the consideration of regional adaptation options in a consultative process with affected regional stakeholders.

SERI's role in the project was to develop scenarios to illustrate potential future developments. On the basis developed for the Global Environment Outlook (GEO), the IPCC and regional scenarios for Europe, four scenarios were developed for discussion in stakeholder workshops. www.seri.at/balaton

Com Footprint: Potential of the Ecological Footprint for monitoring environmental impact from natural resource use

01/2007 – 12/2007, European Commission, DG Environment

This project provided an evaluation of the Ecological Footprint (EF) as a potential indicator for the use of natural resources in a sustainable way, and more specifically, for the decoupling of economic growth from environmental impacts, as well as an assessment of whether a combination of the Ecological Footprint with other related tools and indicators could fulfil these requirements.

Within this project SERI was responsible for the assessment of how other assessment tools can complement the Ecological Footprint in combination to fulfil EU policy requirements and suggested a basket of aggregated indicators capable of monitoring the environmental impacts of natural resource use. www.seri.at/comfootprint

Contributions to the model of the Austria's foreign trade policy

12/2007 – 03/2008, Federal Ministry of Agriculture, Forestry, Environment and Water Management

In fall 2007 the Austrian Federal Ministry of Economics and Labour initiated a process for the formulation of a model for Austria's foreign trade policy. Commissioned by the Federal Ministry of Agriculture, Forestry, Environment and Water Management, SERI contributes to the topic of "resource management" within the work package "sustainability".

A central aspect of world-wide development arises out of the limited availability and, as a result, the dramatically rising prices of natural resources, the current oil price of 100\$ only being the tip of the iceberg. The big challenge for Austria lies in answering this challenge by striving for a pioneer role in the field of resource productivity increase, or at least by keeping up with the leading agents. The resource productivity of the Austrian economy can in this respect also serve as an important indicator for the success of Austria's foreign trade in response to the challenge of the shortage of natural resources.

www.seri.at/foreigntradepolicy

CO2 rucksacks of food transport – Calculation of the CO2 rucksacks of imported versus regionally produced goods

02/2007 – 03/2007, Agrarmarkt Austria (AMA)

The objective of this project was to illustrate the intensity of environmental impacts of selected goods by means of a selected indicator, the so-called CO₂ rucksack. The CO₂rucksack was calculated as the freight transport-related emission of CO₂. In each case, imported products (apples, strawberries, grapes, tomatoes, pepper, cheese, butter, yogurt, beef) were compared with a regionally produced food product.

The results were presented at a press conference with the Austrian minister for agriculture and environment Josef Pröll. ***www.seri.at/AMA_CO2***

CURARE

6/2007 – 11/2007, Aachen Foundation Kathy Beys

The aim of the project CURARE was to identify policy measures which lead to a clear reduction of material, water, energy and land use. A number of measures with an effect on resource use were identified and described—from market-based instruments (e.g. the introduction of a resource tax, a kerosene tax, or reduced turnover taxes for work-intensive services) to information measures (e.g. energy efficiency labels) and the introduction of personal carbon credit cards. Those measures were then assessed in respect to their effectiveness for a comprehensive reduction of resource use and their potential for communication.

SERI worked on the measures resource tax, the reduction of the turnover tax for work-intensive services and a simultaneous adoption of the current reduced turnover tax rates to the normal tax rates, and the realization of the IFAC principles by supportive legal measures ***www.seri.at/curare***

EACH-FOR – Environmental Change and Forced Migration Scenarios

01/2007 – 12/2008, European Commission, 6th Framework Program

EACH FOR investigates the contribution of environmental degradation to forced migration. The project analyzes direct and indirect environmental effects on livelihoods and develops scenarios for forced migration flows. Outcomes will include detailed sub-region or country level forced migration scenarios, a presentation of causes leading to forced migration, with focus on environmental concerns; and an online running "environment degradation caused forced migration" simulation model for demonstration and policy purposes.

SERI did the evaluation of environmental degradation for each case study and is now involved in developing the scenarios on regional and national level. www.seri.at/each-for

EcoChange – Challenges in assessing and forecasting biodiversity and ecosystem changes in Europe

01/2007 – 12/2011, European Commission, 6th Framework Program



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 leads the socio-economic part of the project,, which develops and carries out an integrated sustainability assessment (ISA; see *Ongoing Projects: "MATISSE"*) of the impacts of environmental change on ecosystem goods and services in three case studies. In addition SERI leads the science-policy interface together with partners from France. www.seri.at/ecochange

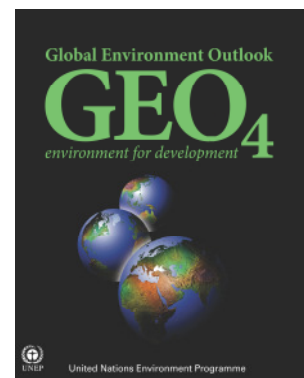
GEO-4 Chapter 7 – Vulnerability of Human-Environment Systems: Challenges and Opportunities

2007, United Nations Environment Program (UNEP)

The Global Environment Outlook (GEO) is the flagship product of the United Nations Environment Program. SERI contributed to Chapter 7 of GEO-4, published in October 2007. 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.

This chapter identifies challenges to and opportunities for improving human-well-being through analyses of the vulnerability of human-environment systems to environmental and socio-economic change. Vulnerability is the combination of exposure and sensitivity to risk and the (in)ability to cope or adapt.

As one of 5 authors (out of a total of 350) Jill Jäger held a presentation at the world launch of "GEO-4" at the UN headquarters in New York on October 26, which received worldwide media coverage. www.seri.at/geo.



Luxembourg Sustainability Strategy

2/2007 – 9/2008, Ministère d'Environnement, Luxembourg

Since early 2007 SERI Germany has moderated the process of developing a new, ambitious sustainability strategy for Luxembourg. By the end of the year, the Luxembourg Vision had been developed, a strategy paper summarizing objectives and plans and highlighting problems and coordination needs. A policy strategy is in internal debate; it will be submitted to the cabinet for decision in spring or early summer 2008. By September 2008, the new strategy will be completed and subsequently be promoted by a PR campaign to make its content known to the public. *Contact: Joachim Spangenberg (joachim.spangenberg@gmx.de)*

NASPA – Sustainable Sanitation Systems – Practical Applications

02/2007 – 12/2007, Federal Ministry of Agriculture, Forestry, Environment and Water Management and Komunalkredit Public Consulting GmbH

NASPA contributes to the application of sustainable sanitation systems. 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.

As alternative sanitary systems are often controversially discussed in public and politics, SERI accompanied the start of 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. The study was finalized in December 2007 and can be downloaded from (German only) www.seri.at/naspa

Pathways to Sustainability

7/2007 – 3/2008, Hans Boeckler Foundation

The “Pathways to Sustainability” project (in German: “Arbeit + Ökologie”, i.e. Employment and Ecology) started ten years ago, in 1988, and ended in 2000. A number of SERI researchers took part in the project, and in 2000/2001 SERI participated in the project transfer phase.

Now the Hans Boeckler Foundation, the scientific and research body of the German trade unions has asked Joachim Spangenberg, the former project coordinator, to evaluate the usefulness of the project for the current debate on ecological modernization. The first result is that although some trends assumed in regarding climate change and biodiversity loss, income and wealth distribution etc. have turned out to be too optimistic. In particular, using the methods and criteria developed, it was easy to demonstrate the narrowness of the new German sustainability policy, identify gaps and suggest improvements.

The project will end in March 2008, yet the work might go on, depending on how serious the union leadership will take sustainability issues, and as how relevant they take the contribution from the project. *Contact: Joachim Spangenberg (joachim.spangenberg@gmx.de)*

Peer Review of the Netherlands Sustainable Development Strategy

2007, 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 and using the 100,000 € the Commission offered for countries willing to conduct such a review (the only member country to do so!). 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 was nominated to be the representative of German science.

The report about the Peer Review of the Dutch Sustainable Development Strategy, was published on June 21, 2007 by the Dutch Environment Advisory Council RMNO (RMNO Series Advice A.10/2007) and is available on www.rmno.nl. Contact: *Joachim Spangenberg (joachim.spangenberg@gmx.de)*

SCOPE² – Sustainable Consumption Policies Effectiveness Evaluation

2007 – 2009, European Commission, DG Research, 6th Framework Program

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.

In 2007 the partners developed an Inventory and assessment of policy instruments, an inventory and assessment of business initiatives, and an analysis of theories on (system) innovation, governance and change of consumer behaviour for SC. www.seri.at/scope2

The use of differential VAT rates to promote changes in consumption and innovation

12/2007 – 05/2008, DG Environment

The European Commission wishes to obtain information and analysis on the likely impacts of changes in value added tax (VAT) for specific products on the sales of such products, on energy consumption over time and on the design of such products and thus the development of product characteristics.

Within this project SERI is responsible for a case study on reduced VAT rates for organic meat and dairy products. Contact: *Andrea Stocker (andrea.stocker@seri.at)*

04/2007 – 05/2007, EU Parliament, Trade Unit

This project provided quantitative assessments of economic and climate impacts of international trade and analysed current climate and trade policies.

SERI was responsible for the quantitative economic and environmental assessments. SERI estimated the range of changes in the production costs of selected products, if production was relocated from Europe to non-Annex B countries under the Kyoto protocol. Furthermore, SERI provided quantitative estimations of the CO₂ emissions related to production and transport of four industrial and two agricultural products, when produced either in Europe or in a typical producer country in other world regions. The final report was presented to EU Members of Parliament by Andreas Kraemer, Director of Ecologic, in June 2007. www.seri.at/trade-and-climate

UNEP-GRAME – Assessment of the Assessments of the Marine Environment

09/2007 – 06/2008, United Nations Environment Program (UNEP)

The United Nations General Assembly in 2005 endorsed the need for a Regular Process for global reporting and assessment of the state of the marine environment. The start-up phase is an assessment of assessments of the marine environment.

The Assessment of Assessments is being carried out by a Group of Experts. Its goal is to identify gaps in data availability, gaps in geographic coverage of existing assessments, gaps in the scope of existing assessments, critical knowledge uncertainties where future research is needed. In addition the Assessment should identify best practices and approaches including assessment methodologies and the best means to make the Regular Process relevant to policy without prescribing management or policy responses.

Jill Jäger was nominated by UNEP to the Group of Experts, together with Ines Omann she is evaluating the results of questionnaire to find examples of best practice in marine assessments. www.seri.at/unep-grame

Water rucksacks – Calculation of the water rucksacks of imported versus regionally produced goods

05/2007 – 09/2007, Agrarmarkt Austria (AMA)

The objective of this project was to illustrate the intensity of environmental impacts of selected goods by means of a selected indicator, the so-called water rucksack. The water rucksack is calculated as the (accumulated) amount of water which is used during the production process of a food product. Four different products (apples, strawberries, potatoes, pepper) were chosen; in each case the water rucksacks of the production abroad and in Austria were compared. The results will be presented at a press conference in March 2008. www.seri.at/AMA_Wasser

What kind of growth is sustainable?

12/2007 – 07/2008, Federal Ministry of Agriculture, Forestry, Environment and Water Management

Together with Karuna Consult SERI is working on a collection of arguments for a different kind of growth. Focal question: "What kind of growth is sustainable?"

Based on the so-called "Limits to Growth" (see www.seri.at/growth) especially economical arguments in relation to life styles, consumption and growth, employment and growth, as well as potential growth drivers like the international financial system are being identified. www.seri.at/wachstum

Ongoing projects

ALARM –Assessing large scale environmental risks for biodiversity with tested methods

02/2004 – 01/2009, European Commission



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 how to stop the negative trends.

From 2004 to 2006 SERI was coordinating the socio-economic research in ALARM and still collaborates in analysing the relation of economic policies, climate change and biodiversity loss. In 2007 the work was dedicated to finalizing the socio-economic modelling of the scenarios and the development of a risk assessment toolkit that show the interested public and scientific world the size of the current risks on biodiversity. www.seri.at/alarm

DEEDS (DEsign EDucation and Sustainability)

10/2006-12/2008, European Commission, DG RES, Leonardo da Vinci Program

The DEEDS project aims at developing modules for teaching sustainability to be integrated into the curricula of design education, and for vocational training for professional designers. It has by now developed sustainability principles which cover all aspects of the field of design and go beyond that based on a more complex sustainability concept provided by SERI Germany. In summer 2007 the testing of modules began in Poznan and in Brighton; more empirical work is to follow. The project will end with a series of conferences by the end of 2008. *Contact: Joachim Spangenberg (joachim.spangenberg@gmx.de)*

ESEE Website

11/2005 – 11/2008, Austrian Ministry for Agriculture, Forestry, Environment and Water Management



Supported by the Austrian Ministry for Agriculture, Forestry, Environment and Water 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. www.seri.at/ESEE

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

11/2006 – 10/2010, European Commission, 6th Framework Program

EXIOPOL sets up a detailed economy-environment model to estimate environmental impacts and external costs of different economic sectors and of the consumption of natural resources for countries in the European Union.

In the EXIOPOL project, SERI works in the area of environmental extensions of the detailed input-output model and is responsible for the categories of material flows, land use and water use. Data is collected for the EU-27 plus the major EU trading partners. In 2007, data collection for 4 testing countries was completed. Main partner in data collection is the Wuppertal Institute for Climate, Environment, Energy in Germany. www.seri.at/EXIOPOL

FORESCENE – Development of a Forecasting Framework and Scenarios to Support the EU Sustainable Development Strategy

12/2005 – 06/2008, European Commission, DG Research, 6th Framework Program

FORESCENE develops an analytical framework for consistent environmental sustainability scenario building (forecasting, backcasting, simulation) in areas such as water, soil, biodiversity, waste and natural resources.



Within FORESCENE, SERI was responsible for organising a high-level expert workshop for the activity field industry/economy, which took place on in October 2006 in Vienna. www.seri.at/forescene

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

10/2006 – 09/2010, European Commission, 6th Framework Program



The central research objective of GoverNat is to test the hypothesis that certain participatory processes and analytical decision tools are particularly useful for improving multi-level environmental governance. Specific research objectives therefore address the enhanced understanding of multi-level governance of natural resources, the development of methods of public and stakeholder participation to be used in such contexts, the effective utilisation of specific analytical decision tools in multi-level governance, and the reflective evaluation of such use.

SERI acts as a praxis affiliate and will host 1-2 fellows in internships in 2008 and 2009, where the fellows can experience from the “insider perspective” the challenges of making decisions on environmental governance at different spatial scales. In addition Ines Omann is teaching at the GoverNat schools about different issues in sustainability science (such as scenario development, multi-criteria decision aid). www.seri.at/governat

INDI-LINK – Indicator-based evaluation of interlinkages between different sustainable development objectives (INDI-LINK)

11/2006 – 04/2009, European Commission, 6th Framework Program



The INDI-LINK project further improves EU sustainable development indicators (SDI), assesses the interlinkages between the different priorities of the EU Sustainable Development Strategy (SDS) and derives conclusions for future SD policy making. SERI serves as scientific coordinator of this research project in the 6th Framework Program (sub-program Scientific Support to Policies).

In 2007, SERI elaborated state of the art reports for two selected EU SDI (Total Material Consumption, Environmentally weighted indicator of material consumption), on which further work in 2008 will be focused. Furthermore, SERI contributed three case study reports on the assessment of interlinkages (Environmental Space; Happy Planet Index; Input-Output Analysis). www.seri.at/indi-link

MATISSE – Methods and Tools for Integrated Sustainability Assessment

04/2005 – 03/2008, EU, 6th Framework Program



MATISSE aims to achieve a step-wise advance in the science and application of Integrated Sustainability Assessment (ISA) of EU policies. The core activity is to improve the tools available for conducting ISAs.

SERI is involved in all main project activities: a common conceptual framework for ISA development, implementation and evaluation, a future tool portfolio for ISA, the application of the new and improved ISA tool in four case studies, and as the workpackage leader the involvement and engagement of stakeholders and policy makers. www.seri.at/matisse

petrE – Resource productivity, environmental tax reform and sustainable growth in Europe

07/2006 – 06/2009, Anglo-German Foundation Research Initiative "Creating Sustainable Growth in Europe"

petrE examines the economic and environmental implications and impacts of environmental tax reforms and assesses the effectiveness of these reforms to improve the use of resources, including labour, and to raise welfare.



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. www.seri.at/petre

PSS Strategies – Development of strategies for designing and implementing sustainable Product-Service Systems

2006 – 2008, bmvit (Federal Ministry of Transport, Innovation and Technology), research program
"Factory of Tomorrow"



The aim of the project was to elaborate on innovations and strategies for product-service-systems (PSS) along product chains in defined demand areas (housing, energy, mobility and transport, energy, reuse and recycling, chemical-based processes, cleaning of buildings, containers, machines and facilities and running machines and facilities). The focus was placed on supervised expert talks in the course of single workshops with companies and other stakeholders (e.g. branch specific associations) along product chains. The aim was to discuss the questions raised and to develop specific strategies for single demand areas for the implementation of sustainable PSS. About 5000 companies and other actors from research, policy and business organisations were contacted and informed. About 500 people participated in the strategy development process. www.seri.at/pdlstrategien

Finished projects

MELIA - Mediterranean Dialogue on Integrated Water Management

2006 – 2007, EU, 6th Framework Program, INCO-MED

The project aimed at structuring a dialogue among key stakeholders concerned and affected by water use and management, such as scientists, professionals, decision makers, policy makers, water providers, media professionals, educators and citizens.

The particular strategic objective of MELIA was to contribute to the improvement of the regional water planning and management under scarcity condition to enhance sustainable development in the Mediterranean region, according with the key activity of the INCO Work Program 2004.

SERI was leader of workpackage 7 "Water Participatory Management and Water Governance" and co-leader of workpackage 9 "Knowledge share". www.seri.at/melia

Modelling sustainable energy scenarios – Renewable energy in Austria: Modelling possible development trends until 2020

12/2005 – 12/2007, bmvit (Federal Ministry of Transport, Innovation and Technology), research program "Energy of Tomorrow"



The project investigated possible economic, social and ecological effects of a sustainable energy policy. Within a participatory modelling process the sustainability model "e3.at" is used to simulate different energy scenarios (with a focus on renewable energy technologies) for Austria until 2020.

One important result of the project was the development of the simulation model “e3.at” that integrates energy, environment and economy in a consistent way and is thus especially suitable to analyse the promotion of renewable energy. The result of scenario modelling was a quantitative estimation of the effects of different renewable energy technologies and potential political measures. Based on this knowledge we derived and determined a sustainable mix of technologies and policy measures. www.seri.at/energiemodell

nachhaltigkeit.at – Information platform for sustainable development

2001 – 2007, Lebensministerium (Federal Ministry of Agriculture, Forestry, Environment and Water Management)

The online platform www.nachhaltigkeit.at contained weekly updated news and general information about events, websites and projects in the realm of sustainable development. The most important element of the platform is a thoroughly investigated “topic of the month”, revealing relevant themes of sustainability in a broad way. The platform was dedicated to decision makers and interested lay people.



The project was a cooperation between IUW, SERI and ZSI. The SERI tasks included the edition of the weekly news and the compilation of 4 “topics of the month” a year. www.seri.at/nh.at

NÖ-Mitte – A Region on its Way to Itself

08/2006 – 03/2007, Regionaler Entwicklungsverband Niederösterreich Mitte and Amt der NÖ Landesregierung, Abteilung RU2

SERI and project partners consulted the middle region of Lower Austria to elaborate a strategy for the region “on its way to itself“. The region sought 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 supported the region by starting a participatory process aiming at identifying the region's qualities and possibilities to achieve well-being for its inhabitants. www.seri.at/noe-mitte

RESA – Effects of resource savings on environment, employment and economy in Austria

12/2005 – 01/2007, Lebensministerium (Federal Ministry of Agriculture, Forestry, Environment and Water Management)

This project addressed the question, which environmental, economic and employment effects on the Austrian society can be expected until the year 2020 if companies start reducing their resource costs now. Together with the project sponsor and experts scenarios were defined, which specify how an increased dematerialization may look like. Afterwards the scenarios were simulated using a new integrated ecological-economic model for Austria. www.seri.at/resa



SPACES – Sustainable Production Consumption System

2005 – 2007, Lucille and David Packard Foundation

The goal of the SPACES project was to arrive at an improved framework and agenda for research and action on the sustainability of production and consumption systems. It focused 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). They were discussed in a stakeholder conference in January 2007 in Chiang Mai, Thailand. A book based on the SPACES case study is in final preparation. www.seri.at/spaces

sufo:trop – Sustainable Food Consumption in Austria: Trends and Options

08/2005 – 06/2007, Austrian Academy of Science

The overall objectives of the project were 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, as well as to develop policy recommendations for a more sustainable consumption.

sufo:trop focused on food consumption patterns in Austria, and by relating them to economic data from households, it made policy recommendations related to sustainable food consumption. It was carried out by a team from SERI and the Department of Economics at the University of Graz. www.seri.at/sufotrop

UBA Footprint – Scientific evaluation of the indicator “Ecological Footprint”

10/2006 – 01/2007, German Environmental Protection Agency (UBA)

The UBA Footprint project provided a comprehensive evaluation of the strengths and weaknesses of the indicator “Ecological Footprint”.

The project focused on the evaluation of the quality of primary data, the underlying accounting system as well as coefficients (equivalence and yield factors) used in the German National Footprint Accounts provided by the Global Footprint Network.

The study also dealt with methodological strengths and weaknesses, elaborating on issues such as the inclusion and exclusion of different environmental categories, underlying assumptions of land use and land use change, the potential to analyse global impacts of national consumption patterns, and the inclusion of energy/CO₂ land areas.

www.seri.at/UBAFootprint

Upcoming projects

e-co – Volkswirtschaftliche Auswirkungen eines nachhaltigen Energiekonsums

01/2008 – 12/2009, Federal Ministry of Transport, Innovation and Technology, research program
“Energy of Tomorrow”

The project e-co analyses the effects of sustainable energy consumption on the economy, the environment and on society by following the Austrian goals in the fields of energy and climate policy until the year 2020. For this analysis scenarios focussing on renewable energy, an increase of energy efficiency and a reduction of energy consumption in private households are simulated and evaluated through an environment-energy-economy model.
Contact: Andrea Stocker (andrea.stocker@seri.at)

Development of a methodology for the assessment of global environmental impacts of traded goods and services

2008-2009, ERA-NET

The main objective of this project is to develop and specify an environmental accounting methodology which allows SKEP member states to quantify and assess the transnational environmental impacts of traded goods and services. More specifically, this project will review and comparatively evaluate a large number of existing environmental accounting techniques that allow to illustrate trans-national impacts of traded goods and services, identify the most suitable methodology and develop it further into an accounting approach, which can be applied by all SKEP member states, specify the (theoretical) framework and define criteria for environmental accounting methodologies to be suitable for the assessment of environmental impacts of imported and exported goods and services, identify data requirements and suggest possible data sources for the improved methodology, and elaborate the roles of different regulatory authorities in providing required data and advise on the practical implementation of the methodology. *Contact: Stefan Giljum (stefan.giljum@seri.at)*

CEECEC – CSO (Civil Society Organizations) Engagement with Ecological Economics

2008 – 2010, EU, 7th Framework Program

CEECEC aims at providing policy makers with high quality, relevant research from the field of ecological economics and to enforce cooperation between ecological economists and civil society organizations through case study learning. Joint working groups will identify and report on key issues for research in water management, mining, energy, forestry and agriculture, based on CSO needs and interests.

Within this project SERI will be responsible for setting up a communication tool in the form of an interactive website for the dissemination of the project results, the installation of a multilingual online course in ecological economics and environmental policy for CSOs and the general public based on the case studies worked upon within the project. *Contact: Fritz Hinterberger (fritz.hinterberger@seri.at)*

cooperation

In 2007, SERI again cooperated with a number of partner institutions, pursuing joint activities in research, training and the organisation of events.

Plattform Footprint



SERI president Friedrich Hinterberger was elected vice chairman of the Plattform Footprint, a project supported by WWF, Greenpeace, Global 2000, Südwind, Klimabündnis and many others with the aim of spreading the concept of the "Ecological Footprint" as an essential measure for sustainability.

More on the Plattform Footprint (in German only) on www.footprint.at

Alternative ECOFIN



Main activities of the European Union focus on economic and financial policies. On April 20-21, 2007 the EU council of ministers of economic affairs and ministers of finance (ECOFIN) met in Berlin. Its decisions have serious impacts on ecology, developing countries and on social inequality and poverty. But still not very much about its activities is known to the public. In the context of its presidency within the EU the German Government tried to commit the European countries keeping its neo-liberal course. Parallel to the "informal" council a broad alliance of civil society organizations including SERI encountered this intention with an Alternative ECOFIN-Conference. More on www.alternativer-ecofin.org

KEIMBLATT ÖKODORF



On request of the KEIMBLATT ÖKODORF, Fritz Hinterberger joined the initiative's scientific advisory board.

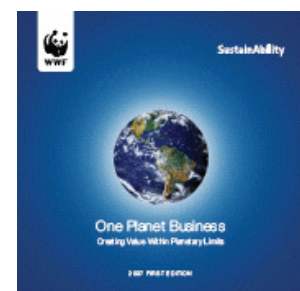
KEIMBLATT ÖKODORF is working on the realization of an ecovillage in Austria.

Read more on www.oekodorf.or.at

One Planet Business Report

Under the title "One Planet Business. Creating Value Within Planetary Limits" WWF and SustainAbility published a report produced in cooperation with SERI, SEI, Best Foot Forward and the Global Footprint Network.

The report explains the concept of ecological overshoot and describes business opportunities within the limits set by ecological systems. More information and download of the report on SERI's project website at www.seri.at/OPB.



Bumerang9

SERI is a member of the Bumerang 9 initiative which involves several institutions, offices and companies working in the fields of sustainable consumption, social and arts around the Schwarzspanierstraße. The first project was realized in summer 2007: the Barefoot Path on Schwarzspanierstraße and Garnisongasse (see also *Events: July*). More on www.bumerang9.at

WeissSee°2250

Ines Omann and Mark Hammer were part of the competence team at the idea camp WeissSee°2250 taking place on over 2000 meters of altitude to develop innovative business and project ideas together with ambitious students. Learn more on weisssee2250.comdao.org



Beyond GDP

SERI was part of a consortium led by Ecologic, Berlin, commissioned to prepare the conference “Beyond GDP” taking place in Brussels from November 19-20, 2007, hosted by the European Commission, the Club of Rome, WWF and OECD.



This conference on “Measuring progress, true wealth and the well-being of nations” had the “objective of clarifying which indices are most appropriate to measure progress, and how these can best be integrated into the decision-making process and taken up by public debate.” Among other input, SERI developed a “virtual expo” on the conference website www.beyond-gdp.eu, presenting a variety of approaches to measure progress “beyond GDP”.

Greenaccord



After his key note speech held at the Vth International Media Forum of Greenaccord (see *Conferences & Lectures: “Vth International Media Forum on the Protection of Nature”*) Fritz Hinterberger was named a honorary member of the association.

Greenaccord is an Italian non-profit Cultural Association which addresses the national and international media community in order to induce a thorough secular reflection and a continuous debate on the role and the responsibility of the journalist towards ecological subjects. www.greenaccord.org

SERI strives to debate its research results with political and private sector decision makers and tries to include a broader public into the discussion around sustainable development by organizing conferences, workshops and other events.

January



Presentation of the SERI book: “Was verträgt unsere Erde noch?”

The first four books in the series “Mut zur Nachhaltigkeit“ (Courage for Sustainability), including SERI’s book “Was verträgt unsere Erde noch?” (How much more can our Earth take?), were presented in January in Berlin, Frankfurt and Munich. www.seri.at/buch

Brownbag Seminar “The Planet”

The Swedish television company has produced a 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. The film features Jill Jäger in several interview excerpts. The cinema version of the film (82 min.) was shown at a SERI Brownbag on March 6, 2007. See also *Media: Television*.

March

Brownbag: Presentation of new DVD “Footprint - Große Ansprüche an einen kleinen Planeten“



The new DVD with Mathis Wackernagl produced by the Plattform Footprint of which SERI is a scientific partner was presented in the course of a Brownbag seminar at SERI’s office in Vienna.

Presentation of results: CO₂ rucksacks of food transport

The results of the study “CO₂ rucksacks of food transport”, commissioned by Agrarmarkt Austria, were presented at a press conference with the Austrian Minister for the Environment, Josef Pröll, on March 16, 2007 in Vienna. See also *New Projects: “CO₂ rucksacks of food transport”*.

April

sufo:trop Workshop

In the course of the project sufo:trop, which focuses on food consumption patterns in Austria, a selection of experts and stakeholders was invited by SERI for a workshop on April 24 to discuss the question of how to motivate Austrians to consume more sustainable food products.

On the basis of a collection of facts and figures presented by the Wegener Center Graz in cooperation with SERI, representatives of the Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Chamber of Agriculture, AMA, the REWE group, as well as Greenpeace, Bio Forschung Austria and other members of various NGOs and ecologically orientated institutions gathered to provide new ideas and potential policy measures in order to motivate Austrian consumers to rethink and change their food consumption habits. The results – a list of practical strategies and concrete suggestions for measures and activities – was used in the sufo:trop policy recommendations related to sustainable food consumption. See also *Finished Projects: "sufo:trop"*

May

ALARM 3rd Consultative Forum

SERI organized the 3rd meeting of the ALARM Consultative Forum (CF) from May 14 to 15 in Vienna. The CF of the socio-economic module of ALARM met again to discuss the preliminary results and ongoing research of the team.



The main issues on the agenda were: the scenarios, modelling results and the integration with other parts of the project; the socio-economic analysis in the field site network; the (preliminary) results of eight case studies; communication and dissemination of the results, in particular to politicians, decision makers and the wider public. The ALARM team received very useful comments and ideas from the forum and will integrate them in their further work. See also *Ongoing Projects: "ALARM"*.

June

PSS Workshop: "Chemical-based processes, cleaning of buildings, containers, machines and facilities, and running of engines and facilities"

Workshopreihe PDL Strategien

In the course of the project PSS Strategies (see *Ongoing projects: "PSS Strategies"*), SERI and Joanneum Research organized the workshop "Chemical-based processes, cleaning of buildings, containers, machines and facilities, and running of engines and facilities" on June 26, 2007 in Klagenfurt. The presentations of the speakers Dr. Christine Jasch, Dr. Michael Wittmann, Mag. Ingrid Kaltenecker, Mag. Leithenmayr, Peter Novak and Mag. Eva Burger provided the participants with a review on Product Service Systems (PSS) in general, and on best-practice examples from the chemical, cleaning and industrial sector in particular, the latter proving the systems' positive ecological and economic impacts.

July

Barefoot Path on Schwarzspanierstraße

From mid-July to September the Barefoot Path on Schwarzspanierstraße and Garnisongasse in Vienna's 9th district invited visitors to walk barefoot on old car tires filled with different materials like sand, bark mulch, or gravel.



The aim was to motivate people to rest, to walk slowly and consciously. Together with a series of up-coming activities, the Barefoot Path points out how social-ecological topics and sustainable resource use can be integrated into everyday life.

As member of the Bumerang 9 initiative which involves several institutions, offices and companies working in the fields of sustainable consumption, social and artistic issues around the Schwarzspanierstraße, SERI is an active participator and co-organizer of the project. www.bumerang9.at

September

Workshop series within the project “Modelling sustainable energy scenarios”

Within the project "Modelling sustainable energy scenarios" a series of four workshops, where around 30 stakeholders discussed the project proceedings and results, accompanied the scientific work. Two of the four workshops took place in 2007 and confirmed the importance of inputs and contributions from the stakeholders to further develop consistent renewable energy scenarios.



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. This enables a reality-based illustration of the potential of renewable energy resources. Furthermore, the involvement of different actors of energy supply and policy with their different interests and values represents a crucial element of a democratic decision process towards a sustainable energy future. See also *Finished Projects: “Modelling sustainable energy scenarios”*.

November

Presentation of SERI’s first Business and Sustainability Report 2006

On November 12, 2007 the SERI GmbH presented its Business and Sustainability Report 2006 to the public.

The event was attended by SERI’s most important stakeholders: staff members and their families, customers, project and business partners, and investors. Fritz Hinterberger (Glücklich werden durch Entschleunigung?), Jill Jäger (Sind wir noch zu retten?) and Stefan Giljum (Wie viele Planeten brauchen wir?) presented three major topics of SERI’s work, Gabriela Christler spoke about sustainable investment. SERI’s presentations were commented by Ernst Gehmacher, Rita Trattinig, and Harald Hutterer. Ines Omann moderated the event.



Pictures of the event as well as audio files of the presentations held are available on www.seri.at/stakeholderevent

The SERI Business and Sustainability Report (in German) can be downloaded from www.seri.at/geschaeftsbericht2006

Symposium: Ways out of the Growth Trap

On November 16-17, 2007, SERI coorganized the symposium "Wege aus der Wachstumsfalle! ... hin zu einem Lebensstil ohne Wirtschaftswachstum?" ["Ways out of the Growth Trap! ... Towards A Life Style without Economic Growth?"] in Würzburg, Germany. The meeting served to develop creative and realizable ideas about how a critical mass of consumers and citizens could gain access to the values and benefits of a life-style beyond the "must have". Successful and potential future models, examples and concepts for such ways out of the growth trap were involved in the process.

PSS Workshop: "Product Service Systems as a chance for post-industrial society: strategy development from a researchers' point of view"

Workshopreihe PDL Strategien

The workshop on November 21 took place in the new seminar centre of the Albert Schweizer Haus in Garnisongasse, 1090 Vienna within the project "PSS Strategies" (see *Ongoing projects: "PSS Strategies"*). A selection of experts discussed potential strategies for the realization and spreading of PSS as well as further demand for research on the basis of the current project results.

December

PSS Workshop: "Energy Conservation Contracting – A Success Story of a Product Servicesystem"

The workshop taking place on December 3 was part of the Project "PSS strategies" (see *Ongoing projects: "PSS Strategies"*) and was organized in cooperation with the Raiffeisen Leasing GmbH. The aim of the workshop was to present successful examples of contracting, which has been established in the energy sector, and to discuss with experts, suppliers and customers how the application of contracting could be spread by the BMVIT.

Presentation of Hans Christoph Binswanger's new book "Die Wachstumsspirale"



Hans Christoph Binswanger presented his new book "Die Wachstumsspirale" (Metropolis-Verlag) on December 7, 2007, at the Gesellschafts- und Wirtschaftsmuseum in Vienna. The event was coorganized by ESD and SERI and moderated by Fritz Hinterberger. More information on the book on www.metropolis-verlag.de

The presentation of SERI projects at national and international conferences is an essential part of SERI's research work and helps to build up a network of partners which follow the same or similar ideas within sustainable development research.

5th International Energy Economics Conference IEWT February 14-16, Vienna, Austria

Andrea Stocker presented the project "Modelling sustainable energy scenarios" (see *Ongoing Projects*): "Erneuerbare Energie in Österreich: Modellierung möglicher Entwicklungsszenarien bis 2020" (co-authors: Anett Großmann, Ingo Wolter, Rainer Madlener).

Conference "Wie grün kann die Linke sein?" (How green can the Left be?) May 12, Berlin, Germany

The new German Left Party held a conference to develop its environmental profile. Joachim Spangenberg in his keynote speech called this a wrong question – today, in the age of climate change and biodiversity loss, every party should be 100% green. The question should rather be "how can the Left be green?", which would be the specific combination of social and environmental objectives to pursue. The conference had pretty good media resonance in newspapers, radio and TV.

Tag der Landeskontrollenrichtungen (meeting of the Austrian regional Courts of Credit) May 22, Innsbruck, Austria

At the meeting of the Austrian regional Courts of Audit ("Rechnungshöfe") on May 22, Fritz Hinterberger talked on "Leben und Arbeiten - Makro-Perspektiven und Rahmenbedingungen" ("Life and work – makro perspectives and framing conditions").

7th International Conference of the European Society for Ecological Economics (ESEE), June 5-8, Leipzig, Germany

At the 7th International Conference of the European Society for Ecological Economics (ESEE) from June 5-8, 2007 in Leipzig under the theme of "Integrating Natural and Social Sciences for Sustainability" Stefan Giljum talked about "Quantifying indirect natural resource requirements of traded products with a global environmental input-output model" (co-authors: Christian Lutz, Ariane Jungnitz; see also *Ongoing Projects*: "petrE") in a session on trade and globalisation.



Ines Omann talked about "The environmental effects of food consumption for different household categories" (co-authors: Birgit Friedl, Mark Hammer, Alexandra Pack; see also *Finished Projects*: "sufo:trop") in a session on consumption and ecolabelling.

Andrea Stocker presented two papers, one about “Environmental, economic and employment effects of resource savings in Austria” and one within the Symposium on ALARM (see *Ongoing Projects: “ALARM”*) scenarios about “The ALARM Project: Socio-economic Modeling and Results” (co-author: Ines Omann).

Joachim Spangenberg also presented two papers, one on biodiversity pressure indicators, and the other on scenario development for assessing biodiversity risks. Both papers are based on ongoing research in the ALARM project.

12th Annual Sustainable Development Research Conference

June 10-12, Märaldalen, Sweden

Märaldalen had been chosen as the conference location to honour the fact that this university, ten years ago, had been the first world-wide to be environmentally certified. Joachim Spangenberg gave a presentation on design for sustainability based on SERI Germany’s DEEDS project (see *Ongoing project: “DEEDS”*) and www.deedsproject.net). Co-authors were Alastair Fuad-Luke of ICIS, Denmark, and Karen Blincoe, the director of the Schumacher college.

16th International Input-Output Conference (IIOA)

July 2-6, Istanbul, Turkey

Andrea Stocker presented "Modeling environmental, economic and employment effects of resource savings in Austria – Results of the RESA project" (co-authors: Friedrich Hinterberger, Anett Großmann, Marc Ingo Wolter; see also *Finished Projects: “RESA”*) and chaired a session on “Environment and the Economy”.



NATO Science for Peace Workshop “Sustainable Energy Systems”

July 4-7, Naples, Italy

The workshop looked for alternatives to the risk prone fossil and nuclear energy system. The alternatives discussed included large-scale wind power, but mainly focussed on decentralized systems. The most disputed theme was the potential contributions of biomass. Joachim Spangenberg and Mario Giampetro argued that biofuel production in intensive agriculture makes no sense energetically and threatens the environment and biodiversity.

Club of Rome's Symposium “The Future of Europe”

September 12-13, Vienna, Austria



Fritz Hinterberger presented the joint paper “Measuring Sustainability and Economic Growth in Europe” (co-authors: Thomas Ruddy, Paul M. Weaver) on how to measure progress towards the achievement of the goals of the the Lisbon strategy for growth and jobs, as well as the EU Sustainable Development Strategy (see also *Highlight: “Measuring Progress”*).

Upper Austrian sustainability research conference, September 24-25, Bad Schallerbach, Austria

On September 24-25, the federal state of Upper Austria held its annual sustainable development research conference in Bad Schallerbach, this time addressing the challenges of globalisation and the opportunities to influence it on a sub-national level. The high level conference attracted representatives from politics, business, unions and the public. Joachim Spangenberg gave the opening speech.

Seminar “Handel(n) für die (Um)Welt. Die neue EU-Handelsstrategie und was das mit uns und der Umwelt zu tun hat“ (“The new EU trade strategy and its links to the environment“)

October 4, Vienna, Austria

Stefan Giljum gave an introductory lecture for this seminar and podium discussion organized by the EU Umweltbureau entitled “Welthandel und Umweltverbrauch: Theorie, Trends, Politikoptionen” (“Global trade and the use of the environment: theory, trends, policy options”).

UBA (Umweltbundesamt) Round Table

October 5, Vienna, Austria

The presentation held by Fritz Hinterberger at the Club of Rome’s Symposium was developed further and presented as “Measuring Sustainability – The ecological footprint of our well-being” (co-authors: Stefan Giljum, Andrea Stocker, Martin Bruckner) at a round table organized by the Austrian Environmental Agency.

UNECE “Environment for Europe” Pan-European Environment Ministers’ Conference

October 10-12, Belgrade, Serbia



This year’s conference covered, as usual, a broad range of issues, with special emphasis on biodiversity issues. A new issue on the agenda (pushed by the environmental NGO movement) was “biodiversity and sustainable consumption”. Joachim Spangenberg presented an analysis of the biodiversity – consumption interface to the NGO preconference, based on earlier research on both issues.

Toblacher Gespräche

October 18-20, Toblach, Italy

Joachim Spangenberg contributed a presentation on economic sustainability to the 2007 Toblach talks “Living, working, producing and consuming differently: building blocks for and transitions to a post-fossil (world) economy“. Other speakers included Hartmut Graßl, Herrmann Ott, Stefan Kohler, Joachim Nitsch and Frank-Walter Steinmeier, the German Foreign Minister and Vice Chancellor.

Algarve Regional Sustainability Indicator System Launch Conference

October 22, Algarve, Portugal

The Algarve indicators are particularly interesting, as they are a pilot undertaking in the absence of a national system of indicators. In the meantime, different other regions of Portugal plan to adapt this system to their local conditions, and a similar process is under way with Andalucia, the neighbouring province of Spain. Having worked with the indicator team beforehand, Joachim Spangenberg was invited to give the keynote lecture opening the conference.

OIKOS 20th Anniversary Conference

October 18, St. Gallen, Switzerland



At the OIKOS (the international student organisation for sustainable economics and management) conference "Limits to Growth – Growing Beyond Limits?" Fritz Hinterberger held his presentation on "Sustainable Development and Economic Growth in Europe – Why limits to growth won't hurt" (co-authors: Thomas Schauer, Paul M. Weaver).

Doctoral seminar at the BOKU

October 22, Vienna, Austria



Andrea Stocker was invited to talk about "Das ALARM Projekt: Sozio-ökonomische Modellierung" ("The ALARM project: Socio-economic Modeling Process") at the doctoral seminar at the BOKU (University of Applied Life Sciences). See also *Ongoing Projects: "ALARM"*.

World Launch of UNEP's "GEO 4"

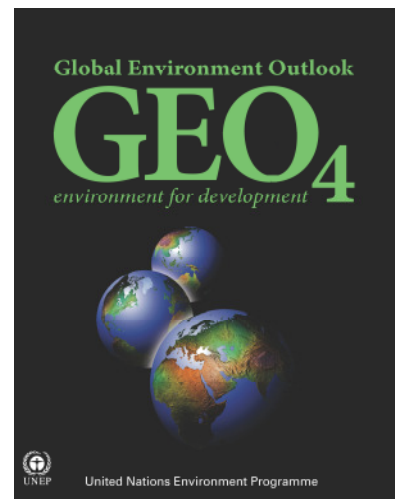
October 26, New York City, USA

As one of 5 authors (from 350) Jill Jäger held a presentation at the world launch of "GEO 4" (see *New Projects: "GEO-4 Chapter 7"* and *Highlights: "Working for international organizations"*) at the UN headquarters in New York, the UN's new report on the state of the environment, which received worldwide media coverage.

The Global Environment Outlook (GEO) is the flagship product of the United Nations Environment Programme.

Jill was coordinating lead author of Chapter 7 on Vulnerability of People and the Environment: Challenges and Opportunities.

SERI also contributed to this chapter which identifies challenges to and opportunities for improving human well-being through analyses of the vulnerability of human-environment systems to environmental and socio-economic change. Vulnerability is the combination of exposure and sensitivity to risk and the (in)ability to cope or adapt. www.seri.at/geo and www.unep.org/geo/geo4



**Vth International Media Forum on the Protection of Nature
November 8, Rome, Italy**

At the Vth media forum of Greenaccord, an Italian NGO of Christian inspiration, working on the role and the responsibility of the journalist towards ecological subjects, Fritz Hinterberger talked about “Why ‘limits to growth’ won’t hurt. Sustainable development and economic growth in Europe”.

**Sustainability Science Conference
November 8-9, Tallinn, Estonia**

Celebrating the 15th anniversary of its founding, the Stockholm Environmental Institute Tallinn Office (SEIT) organised a sustainability science conference in the city’s conference centre. From the institute’s research partners, Martin O’Connor and Joachim Spangenberg were invited for presentations.

**BAUM Forum
November 13, Vienna, Austria**

This year’s Annual Forum of the Austrian Network for Sustainable Development (BAUM) on “Zukunftsfähiger Konsum – Leben, Wirtschaften und Handeln wir fair?” (“Sustainable consumption – acting fair in life and business”). Fritz Hinterberger talked on “Zukunftsfähiger Konsum? Wie funktioniert das?” (“Sustainable Consumption – how does it work?”).

**Lahti Science Day
November 27, Lahti, Finland**

On the Lahti Science Day Fritz Hinterberger held a virtual presentation on “Sustainable Consumption in Sustainable Cities – How to Realize the Opportunity”.

**Meeting of the UN Expert Working Group “Measuring Vulnerability”
November 19-21, Bonn, Germany**

Jill Jäger attended the meeting of the Expert Working Group “Measuring Vulnerability” hosted by the United Nations University Institute for Environment and Human Security (UNU-EHS) in Bonn to hold a presentation on “Improving the adaptive capacity of human-environment systems” based on the Vulnerability chapter in UNEP’s GEO-4 (see *Other Publications: “GEO-4”*).

**Research conference “Creating sustainable growth in Europe”
November 29-30, Berlin**

For the first time, researchers engaged in all four projects financed by AGF in the research program “Creating sustainable growth in Europe” gathered to a policy debate in the German Foreign Ministry and a research conference, where interim results of the different projects were presented. Stefan Giljum presented a paper on “Global dimensions of European resource use” with the session on “Cross Country Productivity and Resources”.

communicating the idea

We develop and compile knowledge, ideas and concepts relevant for decision-making in the context of environmental, economic and social policy. The results of our research activities are communicated to the broad public via various means.

SERI InfoMail

In 2007, 9 editions of SERI's electronic newsletter regularly informed about new projects, publications, events and more. All InfoMails can be found in an archive on www.seri.at/infomail.

SERI Brownbag Seminars

In a loose series of lectures which are open to the public SERI researchers present and discuss their works. In 2007 two Brownbag Seminars took place at the SERI office in Vienna: the presentation of the Swedish TV-film "The Planet" (see also *Media: Television*) and the presentation of the DVD "Footprint - Große Ansprüche an einen kleinen Planeten". www.seri.at/brownbag



SERI teaching



At BOKU (University of Applied Life Sciences, Vienna) during the winter term 2007/08 Fritz Hinterberger, Stefan Giljum and Ines Omann were again 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"). More information on www.seri.at/BOKU

At UVSQ (University Versailles St.-Quentin-en-Yvelines) in 2007 again, Joachim Spangenberg's Professeur invite status was reconfirmed. He teaches sustainable development, sustainable consumption and sustainability indicators.

SERI @ derstandard.at



Within the science section of the online newspaper derstandard.at SERI has again filled a website on the topic of sustainability with several articles on current issues throughout 2007: derstandard.at/?ressort=nachhaltigkeit. See also *Media: Online*.

Consensus Statement on the Importance of National Material Flow Accounting

SERI has launched a new website for the initiative "Tracking Europe's Resource Consumption: A Consensus Statement on the Importance of National Material Flow Accounting" in August 2007.

This initiative funded by the Aachen Foundation Kathy Beys in Germany was started in 2006. It aims at strengthening material flow accounting (MFA) as the core information base for research and policy analysis related to natural resource use and resource productivity and at establishing "Total Material Consumption (TMC)" as a headline indicator in the EU.

On the website you can download the Consensus Statement, post your comments and learn how to become a member of this initiative. www.materialflow-consensus.net

Beyond GDP - International Conference and virtual expo

For the international conference "Beyond GDP" (November 2007 in Brussels) SERI developed a "virtual expo" on the conference website www.beyond-gdp.eu, presenting a variety of approaches to measure progress "beyond GDP". See also *Cooperation: "Beyond GDP"*.

Lernende Regionen ("Learning Regions"): SERI as Consultant

The program aims at the clustering of learning-related activities in rural Austrian regions, the elaboration of a regional strategy for learning and its implementation. In its consulting function, SERI, in cooperation with the regional developer "Raum-Region-Mensch", is providing its knowledge on sustainability, regional development, energy, quality-of-life, etc. *Contact: Lisa Bohunovsky (lisa.bohunovsky@seri.at).*

SERI Studies

SERI Studies is a series of in-depth reports from our projects devoted to one of SERI's research fields. www.seri.at/studies

Bohunovsky, L., Bruckner, M. and I. Omann. 2007. "Partizipative Entwicklung von Schwerpunkten und Handlungsfeldern im Einsatz von Technologien zur Nutzung Erneuerbaren Energien der e5-Gemeinde Raabau-Lödersdorf". SERI Study No. 6, March 2007. Sustainable Europe Research Institute, Vienna.



Partizipative Entwicklung von Schwerpunkten und Handlungsfeldern im Einsatz von Technologien zur Nutzung von Erneuerbaren Energien der e5-Gemeinde Raabau-Lödersdorf

Lisa Bohunovsky, Martin Bruckner, Ines Omann



Abstract: The paper describes the local case study of the ARTEMIS project ("Assessment of Renewable Energy Technologies on Multiple Scales – a Participatory Multi-Criteria Approach", www.projectartemis.net), where local energy scenarios for 2020 were developed for two Austrian communities in cooperation with energy experts and stakeholders. The scenarios specifically addressed electricity and heat generation from renewable energies as well as, to a lesser extent, energy efficiency measures. In a second step, evaluation criteria were developed in collaboration with and weighted by stakeholders. The evaluation of the scenarios was based on impact matrices, which included the impacts of the scenarios on the criteria described above. The data was compiled (1) by exploring and integrating existing databases and studies into scenario impact modeling and (2) through personal interviews with selected experts and stakeholders. The evaluation and ranking of the scenarios was calculated using the multi-criteria evaluation (MCE) method PROMETHEE.

The results of the scenario ranking are used as input for the 'e5-process' that meanwhile started in the case study communities (www.e5-gemeinden.at). 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.

Stocker, A., Hinterberger, F., Grossmann, A. and M.I. Wolter. 2007. "Wachstums-, Beschäftigungs- und Umwelteinwirkungen von Ressourceneinsparungen in Österreich". SERI Study No. 7, May 2007. Sustainable Europe Research Institute, Vienna.

Abstract: Um gleichzeitig ein Wachstum der Wirtschaftsleistung und eine Eindämmung des Ressourcenverbrauchs erreichen zu können, muss die Ressourceneffizienz von Unternehmen verbessert werden. Dafür gibt es laut internationalen Studien erhebliche Potentiale, die zu einer deutlichen Verbesserung der Wettbewerbsfähigkeit der heimischen Wirtschaft beitragen könnten.

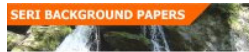
Dabei ist aber zu beachten, dass Einsparungen auf der Unternehmensebene nicht automatisch zu einer gesamtwirtschaftlichen Reduktion des Ressourcenverbrauchs führen. Wenn verbesserte Ressourceneffizienz die Kosten von Produkten senkt kann die gesamte Nachfrage nach diesen oder anderen Produkten ansteigen; dieses Phänomen bezeichnet man als Reboundeffekt. Außerdem ist zu berücksichtigen, dass Effizienzsteigerungen nicht nur die Ressourcenproduktivität verbessern sondern auch die Arbeitsproduktivität erhöhen, da Güter und Dienstleistungen auch mit geringerem Arbeitsaufwand hergestellt werden können. Wächst die Arbeitsproduktivität schneller als die Wirtschaft, erhöht sich die Arbeitslosigkeit.

In dieser Studie wurde daher analysiert, welche Auswirkungen auf Beschäftigung, Wirtschaft und Umwelt für die österreichische Volkswirtschaft resultieren, wenn Unternehmen verstärkt in die Erhöhung der Ressourcenproduktivität investieren und damit die innerbetrieblichen Kosten senken. Dazu wurden vier Szenarien entwickelt und mit Hilfe des Modells e3.at simuliert.

SERI Background Papers

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www.seri.at/backgroundpapers



Kein Teil der Erde steht für sich allein.
Das „System Erde“ und wie wir damit umgehen.

Lisa Bohunovsky und Ines Omann



Bohunovsky, L. and I. Omann. 2007. “Kein Teil der Erde steht für sich allein. Das 'System Erde' und wie wir damit umgehen”. SERI Background Paper No. 12, April 2007. Sustainable Europe Research Institute, Vienna.

Abstract: Der Mensch greift durch seine Handlungen täglich in das komplexe System Erde ein. Die Komplexität dieses Systems führt dazu, dass menschliche Handlungen oft große und unerwartete Auswirkungen auf Natur, Kultur, Gesellschaft und Wirtschaft haben. Dieses SERI Background Paper beschreibt, was es bedeutet, dass die Erde ein „komplexes System“ ist, welche Eigenschaften damit verbunden sind und wie der Mensch diese Tatsache berücksichtigen kann und sollte. Anhand von drei Beispielen werden komplexe Zusammenhänge aufgezeigt und deutlich

gemacht, dass Probleme in einem größerem Zusammenhang gesehen werden müssen, um erfolgreiche Lösungen zu finden.

Horak, D., Laaber, M., Müller, A., Neururer, C., Reinstadler, S., Schwarzbauer, A., Stadelmann, J. and L. Strahlhofer. 2007. “Energieautarke Gemeinden’. Bewertung des Erreichens der Energieautarkie dreier österreichischer Gemeinden“. SERI Background Paper No. 13, April 2007. Sustainable Europe Research Institute, Vienna.

In dieser Seminararbeit werden drei verschiedene Gemeinden—Weiz, Mäder und Güssing—bezüglich ihres Strebens, energieautark zu werden, verglichen. Dies geschieht auf Basis eines im Zuge der Arbeit erstellten Kriterienkataloges.

SERI Working Papers

SERI Working Papers are the outcome of ongoing research activities at the Sustainable Europe Research Institute (SERI). They present preliminary results which are open for debate and improvement for publication in scientific journals. www.seri.at/workingpapers

Giljum, S., Behrens, A., Hinterberger, F., Lutz, C. and B. Meyer. 2007. “Modelling scenarios towards a sustainable use of natural resources in Europe”. SERI Working Paper No. 4, January 2007. Sustainable Europe Research Institute, Vienna.



Modelling scenarios towards a sustainable use of natural resources in Europe

Stefan Giljum, Arno Behrens, Friedrich Hinterberger, Christian Lutz, Bernd Meyer

Abstract: The issue of unsustainable patterns of natural resource use currently experiences a steep rise on the policy agenda both in Europe and other world regions. A rapidly increasing body of literature assesses past developments of material use and resource productivities, however, little effort has so far been devoted to forecast future patterns of natural resource use and to provide an ex-ante assessment of environmental and economic effects of different resource policies. This paper presents results from the international research project „MOSUS“ (Modelling opportunities and limits for restructuring Europe towards sustainability), which was designed to fill some of these research gaps. In this project, a global economy-energy model system was extended by a worldwide database on material inputs, in order to run three scenarios for European development until 2020: a baseline scenario without additional policy intervention and two sustainability scenarios, simulating the implementation of six packages of policy measures geared towards decoupling economic activity from material and energy throughput.



Omann, I. 2007. "A multicriteria tool for evaluating the Impacts of Product Service Systems on Sustainable Development: An application in Austrian companies". SERI Working Paper No. 5, 2007. Sustainable Europe Research Institute, Vienna.

Abstract: The development and implementation of eco-efficient product service systems (PSS) is one company-related step towards sustainable development. Despite several isolated initiatives, PSS have still not been implemented widely. Possible reasons for this failure to disseminate the concept are the lack of appropriate supporting methods and tools for the companies and the lack of acceptance by consumers.

This paper presents a multicriteria tool which was developed in order to evaluate PSS ideas according to their contribution to sustainable development in a set of selected companies and thus addresses the lack of supporting methods. With the tool the PSS ideas are evaluated through criteria in three categories (economic, environmental, social). In addition, the tool presents a service for companies on different levels. It is a decision support tool, an awareness-raising and learning tool as well as a tool to increase the innovative capacity. Companies learned about the idea of sustainable development, about their products' sustainability impact and about the transition from products to services. The results of the evaluation are presented and interpreted in relation to the different sustainability dimensions.

Stocker, A., Jäger, J., Omann, I. and B. Meyer. 2007. "The Socio-economic Modelling for the ALARM Project: Process and Results". SERI Working Paper No. 6, June 2007. Sustainable Europe Research Institute.

Abstract: The aim of this paper is to identify important socio-economic drivers of biodiversity loss and to analyse their possible political and economic dynamics by modelling socio-economic and environmental parameters of different scenarios, as well as to draw conclusions about the effectiveness of the policy options included in the scenarios. In order to slow down the rapid loss of biodiversity adequate policy strategies covering a wide range of policy domains in an integrated manner must be developed in order to deal with driving forces that cause pressures on ecosystem functions.

Other working papers

Großmann, A., Stocker, A. and M.I. Wolter. 2007. "Das integrierte Umwelt-Energie-Wirtschafts-Modell e3.at (Environment – Energy – Economy – Austria)". Working Paper Nr. 1 of the EdZ project Modellierung nachhaltiger Energieszenarien, Vienna.

This Working Paper introduces the simulation model which has been developed in the course of the EdZ project "Erneuerbare Energie in Österreich: Modellierung möglicher Entwicklungsszenarien bis 2020" in corporation of the Gesellschaft für Wirtschaftliche Strukturforschung (GWS) and the Sustainable Europe Research Institute (SERI).

Maxim, L., Spangenberg, J. H. and M. O'Connor. 2007. "An analysis of risks for biodiversity under the DPSIR framework", *Cahier de C3ED* No. 2007-2, Versailles St.-Quentin-en-Yvelines, C3ED-UVSQ: 26.

The paper is a result of the ALARM project and describes how the well-known DPSIR approach must be modified to overcome ambiguities and to adapt it to the theme of biodiversity loss. This is achieved by deriving clear-cut definitions based on the prism/tetrahedon of sustainability. The resulting definitions have been tested in a number of cases; the case studies plus this paper are foreseen for publication as a special journal issue

Stocker, A., Großmann, A., Kowalski, K., Madlener, R.I. and M.I. Wolter. 2007. "Erneuerbare Energie in Österreich: Modellierung möglicher Entwicklungsszenarien bis 2020". Working paper of the project EdZ presented at the IEWT 2007, February 14-16, 2007, Vienna.

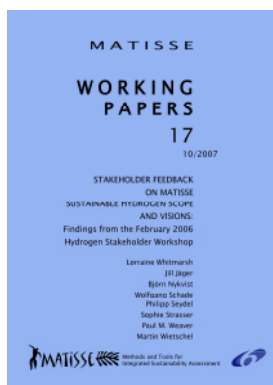
The project investigates possible economic, social and ecological effects of a sustainable energy policy. Within a participatory modelling process a sustainability model is used to simulate different energy scenarios (with a focus on renewable energy technologies) for Austria until 2020. This working paper summarizes the works on the scenario development.

Stocker, A., Hinterberger, F., Großmann, A. and M. I. Wolter. 2007. "Modeling environmental, economic and employment effects of resource savings in Austria". Working paper of the project RESA presented at the 16th International Input-Output Conference, Istanbul, Turkey, July 2007.

Abstract: The paper addresses possible environmental, economic, and employment effects on Austrian society under the assumption that companies increase their investments in resource productivity. Together with the project sponsor and experts four scenarios were defined which specify what an increased dematerialization may look like. The scenarios were simulated for the period 2005 - 2020, using a new integrated ecological-economic model for Austria. This model integrates an input-output model with an energy and a resource use model and is linked to a world model to show the effects of international trade on Austrian economy.

The modeling results show that savings on resource costs may lead to substantial economic improvements and employment increases. However, due to rebound effects, the efficiency gains do not lead to savings in the use of resources. Thus, increasing resource efficiency is not sufficient for achieving sustainable development and must be accompanied by other activities and measures.

Whitmarsh, L., Jäger, J., Nykvist, B., Schade, W., Seydel, P., Strasser, S., Weaver, P.M. and M. Wietschel. 2007. "Stakeholder Feedback on MATISSE Sustainable Hydrogen Scope and Visions: Findings from the February 2006 Hydrogen Stakeholder Workshop". MATISSE Working Paper 17 (10/2007). Download from www.matisseproject.net



Abstract: As part of a cluster workshop on sustainability of hydrogen transport technologies held in Frankfurt on 21st February 2006, MATISSE researchers conducted break-out discussion groups with, and distributed self-completion questionnaires to, stakeholders in hydrogen transport technology. The break-out group discussions revealed that stakeholders do not hold naïve views about the potential for hydrogen by itself to meet requirements for sustainability within either transport or wider energy systems. Most stakeholders did not equate hydrogen transport technology with sustainable mobility. For sustainable transport, stakeholders acknowledged the importance of modal shift and reduced demand (through more public transport use, congestion charging, teleworking, etc.); two groups emphasised a need for societal value change (e.g., away from aspirations to own powerful/luxury cars). Furthermore, for many (though not all) stakeholders the future involves hydrogen technologies co-existing with other transport technologies, e.g., biofuels and hybrid vehicles. Several participants pointed to the risks associated with focussing on one technological solution to the exclusion of possible alternatives. Nevertheless, stakeholders were broadly positive about hydrogen technologies; many pointed to the potential for hydrogen to offer a solution to problems of emissions, energy security and international competition. Participants highlighted a range of requirements that hydrogen - or indeed alternative technological, institutional and behavioural options for sustainable transport/energy systems - must meet to be defined as "sustainable". These requirements go beyond simply considerations of hydrogen production and supply to include sustainable levels of mobility and societal values that impact on travel choices.

Whitmarsh, L., Bohunovsky, L., Jäger, J. and B. Nykvist. 2007. "Stakeholder Feedback on MATISSE Sustainable Visions and Pathways: Findings from the June 2007 Hydrogen Stakeholder Workshop". MATISSE Working Paper 18 (10/2007). Download from www.matisseproject.net

Abstract: The stakeholder workshop discussed here is part of an iterative process of consultation and social learning with stakeholder groups in conducting Integrated Sustainability Assessments (ISAs) of sustainable hydrogen and mobility within the MATISSE project.

Break-out discussion groups and self-completion questionnaires were used to elicit stakeholders' feedback on, and further input to, the hydrogen and mobility transition modelling work conducted within MATISSE, to identify whether sustainability visions should be modified and which policies should be assessed, and to foster social learning amongst stakeholders. In respect of the vision of sustainable hydrogen-based transport developed in MATISSE, stakeholders agreed that different countries should use different feedstocks and production technologies, and most agreed that it will be necessary to use conventional hydrogen production methods in the initial phase of a hydrogen transition, before (rapidly) moving towards a renewable-based transport system. Overall, the questionnaire results show stakeholders are ambivalent about the social and economic impacts of hydrogen-based transport, but are optimistic about its environmental impact. Furthermore, the group discussions revealed concerns that a hydrogen transition may imply a move towards more unsustainable transport in some respects, namely increasing social inequality and problematic technologies (i.e. carbon capture and sequestration [CCS] and nuclear) involved in hydrogen production, and contributing to unsustainable economic, energy and transport growth. These concerns about the possible unsustainability of hydrogen suggest these issues would be usefully addressed in policy assessments of hydrogen. Indeed, most participants advocated an alternative sustainable transport vision – most commonly, a 'modal shift' vision – to be considered in addition to a hydrogen-based transport vision. Alternative transport technologies (biofuels, hybrid-electrics) and reduced mobility demand were also discussed, though there was less agreement about the merits of these alternatives. Overall, stakeholders at this workshop were very optimistic about the role of transport technologies – particularly hydrogen – in tackling problems of unsustainability. In respect of particular policies that should be assessed, stakeholders particularly favoured economic measures, such as carbon/emissions taxes, and research, development and demonstration (RD&D) to promote novel technologies. Investment in public transport infrastructure, public education, and institutional changes (e.g., to avoid global inequalities, to develop locally relevant solutions) were also suggested for promoting sustainable transport. Around a third of stakeholders said they had changed their views as a result of participation in the break-out groups; and most said they had learnt something.

SERI book

Jäger, J. 2007. *Was verträgt unsere Erde noch? Wege in die Nachhaltigkeit*. With contributions from Bohunovsky, L., Giljum, S., Hinterberger, F., Omann, I. and D. Schnepf. Ed. by Klaus Wiegandt. Fischer Taschenbuch Verlag, Frankfurt am Main.

The book "Was verträgt unsere Erde noch? Wege in die Nachhaltigkeit" 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.

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?". The remaining four chapters 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 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.

The book was released at major public events in Berlin (January 12, 2007), Frankfurt (January 19, 2007) and Munich (January 25, 2007). www.seri.at/buch

The book is listed under the top ten books of future literature 2007 by the Robert-Jungk-Bibliothek for Future Questions. www.jungkbibliothek.at/topten2007

FORUM FÜR VERANTWORTUNG 

Jill Jäger
WAS VERTRÄGT
UNSERE
ERDE NOCH?
Wege in die Nachhaltigkeit

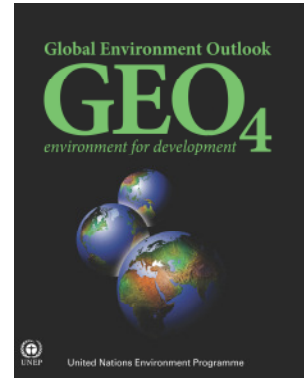


Book contributions

Jäger, J. and M.T.J. Kok. 2007. "Vulnerability of People and the Environment: Challenges and Opportunities". In *Global Environmental Outlook 4*. UNEP. 301-360.

The Global Environment Outlook (GEO) project is the implementation of UNEP's mandate to keep the global environment under review. Initiated at the request of the UNEP Governing Council in 1995, GEO is both a process and a series of reports, analyzing environmental change, causes, impacts, and policy responses. It provides information for decision-making, supports early warning and builds capacity at the global and sub-global levels. GEO is also a communication process that aims at raising awareness on environmental issues and providing options for action.

The fourth report in the Global Environment Outlook (GEO-4) assessment series launched on 25 October provides a comprehensive and authoritative overview of the state of the environment. GEO-4 addresses the key challenges facing our planet, highlights emerging environmental issues that require policy attention and makes recommendations for decision-makers to act. See also *New Projects: "GEO-4 Chapter 7"* and *Highlights: "Working for international organizations"*.

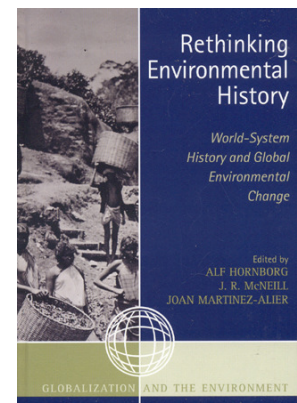


Jasch, C., Hammerl, B., Hammer, M., Pamminger, R., Kaltenegger, I., Hinterberger, F. 2006. *Produkte und Dienstleistungen von morgen. Nachhaltige Innovationen für Firmen und KonsumentInnen, Band 2, Chemie, Reinigung, Maschinen, Recycling*. Books on Demand, Norderstedt.

Product service systems are regarded as decisive innovations and business strategies on the way to sustainable development. This book analyses the possibilities and limits of such a contribution to sustainability by product service systems. The first volume having presented examples from the fields of nutrition, living, mobility, and energy, this second volume focuses on chemistry, cleaning, machines, and recycling.

Muradian, R. and S. Giljum. 2007. "Physical trade flows of pollution-intensive products: Historical trends in Europe and the world". In: Hornborg, A., McNeill, J. and J. Martinez-Alier (eds.). *Rethinking Environmental History: World-System History and Global Environmental Change*. Altamira Press.

In the debate on international trade, the environment and sustainable development, a growing number of empirical studies are devoted to the assessment of the international distribution of environmental pressures induced by the production of goods requiring intensive use of natural resources. This chapter contributes to this discussion by analyzing trends in imports and exports of pollution-intensive products in different regions throughout the world. Our results suggest that exports of pollution-intensive products (quantified in units of weight) are increasing across time in nearly all of the regions considered. However, from 1978 to 1996, the share of pollution-intensive exports to total exports (measured in monetary units) decreased in the EU, U.S. and Japan, increased in South America and Africa, and remained constant in Southeast Asia. We also found that the EU was a net importer of products from polluting sectors during the whole period of analysis. Despite the limitations of the analysis in terms of reliability and completeness of data, the current chapter contributes to the assessment of the worldwide distribution of exports from polluting sectors and, indirectly, to the debate on the "pollution haven" hypothesis.



Spangenberg, J.H. 2007. "Das Überlebensspiel – Ökologische und soziale Folgen von Wirtschaftswachstum und Effizienzstrategien für Schwellen- und Entwicklungsländer." In: Rudolph, S. (ed.). 2007. *Wachstum, Wachstum über alles? Ein ökonomisches Leitbild auf dem Prüfstand von Umwelt und Gerechtigkeit. "Ökologie und Wirtschaftsforschung"*. Band 71. Metropolis Verlag: Marburg.

This book attempts to question the systemic necessity of economic growth as well as established indicators of wealth. On the basis of an empirical balance of common growth strategies the authors deal with ecological aspects like energy and material consumption, the loss of biodiversity, as well as social aspects like employment effects and international implications of growth strategies. Alternatives to the growth paradigm are presented and assessed from a political point of relevance.

Spangenberg, J.H. 2007. "The Institutional Dimension of Sustainable Development". In Hak, T., Moldan, B. and A.L. Dahl (eds.). *Sustainable Indicators. A Scientific Assessment*. SCOPE Books Series No. 67, Washington, Island Press. 107-124.

Karlsson, S., Dahl, A. L., Biggs, R. (O.), ten Brink, B. J.E., Guitierrez-Espeleta, E., Hasan, M.N.H., Laumann, G., Moldan, B., Singh, A., Spangenberg, J. H., and D. Stanners. 2007. "Meeting conceptual challenges". *Sustainable Indicators. A Scientific Assessment*. SCOPE Books Series No. 67, Washington, Island Press. 27-48.

Tomáš Hak and Bedřich Moldan of Prague's Charles University coordinated the ASI project (Assessing Sustainability Indicators) on behalf of SCOPE, the international association of environmental science. The book documents the consensus found as well as individual contributions.

Spangenberg, J.H. 2007. "Defining Sustainable Growth: The Inequality of Sustainability and its Applications". In S.D. Antonello (ed.). *Frontiers in Ecology Research*. New York. Nova Science Publishers.

This book section is an extended version of an earlier journal publication, illustrating how the "Inequality of Sustainability" can be used as quick-and-dirty assessment tool for different types of unsustainable development.

Spangenberg, J.H. 2007. "Ausdifferenzierung des Nachhaltigkeitskonzepts. Von der Grenzziehung zum Komplexitätsmanagement". In Meier, K. and E. Wittlich (ed). *Theoretische Grundlagen nachhaltiger Entwicklung*. Berlin. Karl Dietz Verlag. 215-276.

This book (only in German) is something rather unique: it is the codumentation of a workshop bringing together different approaches to sustainable development and their underlying theoretical concepts. The documentation of the theoretical approaches and the discussion between them is a first step to the identification of common ground between different approaches to sustainability, and a starting point for further dialogues between different schools of thought.

Ndebele, P., Hamann, R., Mahomed, L., Hildén, M., Temmes, A., Rautalahti-Miettinen, E., Stranius, L., Statz, A., Röhr, U., Spangenberg, J.H., Karg, L., Gege, M. and B. Dalal-Clayton. 2007. *A New Sustainable Development Strategy: An Opportunity not to be missed. Peer Review NSDS*. Report of a Peer Review of The Netherlands Sustainable Development Strategy, conducted by a peer panel from Finland, Germany and South Africa. RMNO series Advice A.10, RMNO, Den Haag. 144 p.

This is the final report of the peer review of the Dutch Sustainable Development Strategy. It has been well taken in the Netherlands, and a number of the suggestions included are already adopted by the government and put into policy practice.

Church, C. and S. Lorek. 2007. "Linking policy and practice in sustainable production and consumption: an assessment of the role of NGOs". *International Journal of Innovation for Sustainable Development (IJISD)*. Vol.2, No.2. 230-240.

Abstract: The paper looks at NGOs activities in Sustainable Production and Consumption and obstacles being faced. It identifies lessons for policymakers seeking to engage civil society and makes recommendations on how academics can co-operate more effectively with civil society. Insights are drawn from recent studies on stakeholder involvement in the international political process and a series of surveys and semi-structured interviews. The authors identify four challenges. Effort should

- be planned more strategically
- link sustainable consumption to current priorities
- ensure better links between global and local and
- NGOs have to better link to other interest groups.

Spangenberg, J. H. 2007. "Precisely Incorrect". In: *Alternatives*. 33.2-3, 2007. p.32.

Favoured by most economists, the GDP makes clear-cut prognoses that have only a loose connection to reality. The fallacy of misplaced precision may help economics to dress itself as an exact science, but in fact reenders the results more quationable.

Spangenberg, J.H. and I. Omann. 2006. "Assessing social sustainability: social sustainability and its multicriterical assessment in a sustainability scenario for Germany". In: *International Journal of Innovation and Sustainable Development (IJISD)*. Vol. 1, No. 4, 2006, 318-348.

Abstract: Social sustainability is a qualitative criterion to be applied to different domains, i.e. the economy, society and the population. It is challenged by current political and economic developments. Based on a German study comprising discourse-derived narratives and extensive modelling, this paper demonstrates how the social sustainability of strategies for sustainable development can be evaluated. For this objective a simplified form of 'horizontal', i.e. non-hierarchical, explorative Multi Criteria Analysis (MCA) is applied. First, the social quality criteria developed by the project are used for the assessment, and secondly, criteria from the literature are applied to the same scenario. The MCA demonstrates that strategies exist, which combine economic and environmental success with social sustainability.



The paper illustrates how policy impact can be assessed ex ante and subsequently be monitored. It furthermore demonstrates that – despite their rather divergent phrasing – the existing social sustainability criteria have enough in common to allow for a robust assessment.

Spangenberg, J.H. 2007. "Integrated scenarios for assessing biodiversity risks". In *Sustainable Development* 15(6). 343-356.

and

Spangenberg, J.H. 2006. "Towards integrated long-term scenarios for assessing biodiversity risks". *Revista Internacional de Sostenibilidad. Tecnologia y Humanismo* 1(1). 91-102.

Both these publications provide a concise overview of the core elements of the scenarios developed for the ALARM project. An extended version is foreseen as a book publication in 2008.

Settele, J., Kühn, I., Klotz, I., Hammen, V. and J.H.Spangenberg. 2007. "Is the EC Afraid of Its Own Visions?" In *Science* 315. p.1220.

In this letter to the editor the authors highlight the benefits of large-scale integrated research projects (IPs) like ALARM (about 250 scientists from 69 institutes in 35 countries). They express their regret that the EU Commission without having any empirical evidence at hand decided that such projects are unmanageable and has scaled down the project volumes in the 7th FP.

Behrens, A., Giljum, S., Kovanda, J. and S. Niza. 2007. "The material basis of the global economy. World-wide patterns in natural resource extraction and their implications for sustainable resource use policies". In *Ecological Economics* 64 (2). 444-453.



Abstract: Material flow accounting and analysis (MFA) has been established as an influential framework for quantifying the use of natural resources by modern societies. So far, however, no reference data for overall scale and trends of global extraction of natural resources and their distribution between different world regions has been available. This paper presents the first comprehensive quantification of the material basis of the global economy, i.e. used domestic extraction in a time series from 1980 to 2002. We analyse time trends for major material groups (fossil fuels, metals, industrial and construction minerals, and biomass) disaggregated into seven world regions. This allows for (a) an illustration of the global economy's physical growth driven by worldwide processes of economic integration over the past decades, and (b) an indication of the worldwide distribution of environmental pressures associated with material extraction. The results show that annual resource consumption of the world economy increased by about one third between 1980 and 2002. This indicates that scale effects due to economic growth more than compensated for other effects, such as the relative increase of the service sectors' contribution to GDP (structural effect) and the use of new production technologies with higher material and energy efficiency (technology effect). The observed growth of natural resource extraction is unevenly distributed over the main material categories, with metals showing the highest growth rate. The regional analysis shows the increasing importance of Asia and Latin America in global resource extraction. On the global level, material intensity, i.e. resource extraction per unit of GDP, decreased by about 25%, indicating relative decoupling of resource extraction from economic growth. The paper concludes with policy recommendations for a more sustainable use of natural resources.

Spangenberg, J.H. 2007. "Biodiversity pressures and the driving forces behind". In *Ecological Economics* 61(1). 146-158.

This paper presents the results of the biodiversity pressure analysis undertaken in the ALARM project. The specific character of this approach is that it does not intend to measure biodiversity as such, but the pressures causing biodiversity losses, and identify their respective driving forces as a basis for deriving preservation policies.

Bohunovsky, L., Madelener, R., Omann, I., Bruckner, M. and S. Stagl. 2007. "Integrierte Nachhaltigkeitsbewertung von lokalen Energieszenarien – Lokale Energiesysteme der Zukunft". In *Ökologisches Wirtschaften*. Heft 2/2007. 47-50.

Gemeinden, die ihren Beitrag für ein nachhaltiges Energiesystem leisten wollen, müssen ihre Optionen anhand einer Reihe von Nachhaltigkeitskriterien abwägen. Dieser Beitrag berichtet über die Entwicklung und Erprobung eines Verfahrens für eine partizipative multikriterielle Bewertung von lokalen Energieszenarien.



Jäger, J., Omann, I. and S. Schabhüttl. 2007. "Ergebnisse einer Studie zu Umwelt und Innovation - Ökologische Konzepte in der europäischen Politik". In *Ökologisches Wirtschaften*. Heft 4/2007. 47-50.

Die Umweltbranche boomt und ökologische Innovationen sind in aller Munde. Doch finden diese theoretischen Konzepte und innovativen Technologien wirklich Eingang in die politische Praxis? Und wie können diese Ansatzpunkte zur politischen Ausgestaltung einer nachhaltigen Entwicklung beitragen?

Settele, J., Hammen, V., Klotz, S., Spangenberg, J. H. and I. Kühn. 2007. "Den Biodiversitätsverlust stoppen. Methoden zur Risikoabschätzung und Strategien zur Verringerung". In *Ökologisches Wirtschaften* Heft 3/2007. 39-42.

This paper describes the state of the art of the ALARM project, the structure of the research process and the results achieved so far.



SERI Business and Sustainability Report 2006

The first SERI GmbH business and sustainability report 2006 was presented on November 12, 2007 (see *Events: "Presentation of SERI's first Business and Sustainability Report 2006"*). It provides an overview of our company and our work and informs about our activities towards sustainability. www.seri.at/geschaeftsbericht2006

In the project "Nachhaltige Entwicklung in Wiener Betrieben" (Sustainable Development in Viennese Companies), SERI was honored for the business and sustainability report 2006 in the course of the ÖkoBusinessPlan Vienna 2008.

SERI Fact Sheets

SERI Fact Sheets concisely summarize the key results of several SERI projects. They are made for science, politics and the interested public. So far, the following fact sheets are available for download on www.seri.at/factsheets: sufo:trop, RESA, ARTEMIS, NÖ-Mitte, MOSUS, Energiewende, Mischarbeit, e3.

SERI aims to make the results of its work available to everyone—by contributing articles to various online and print media (see also the chapter *Publications*) as well as by providing its expertise for film documentaries, scientific reports and interviews. Find here a selection of SERI’s media contributions in 2007.

Print

Bild der Wissenschaft plus, special edition, 11/2007

“Mit dem Barsch kam das Elend“

One of a great number of media reactions to the book series “Mut zur Nachhaltigkeit”: A special edition of the supplement to the magazine “Bild der Wissenschaft“ in cooperation with the Forum für Verantwortung including a 3-page report on the ecological disaster of Viktoria Lake by Jill Jäger based on a chapter in her book “Was verträgt unsere Erde noch?” (see *Publications: “SERI-book”*) and an interview in which she talks about her work and the status quo of environmental research.



Frankfurter Rundschau, March 6, 2007

„Jeder ausgegebene Euro bewegt irgendwo auf der Welt ein Kilogramm Natur“

An interview with Fritz Hinterberger within a series of interviews related to the book series “Courage for Sustainability” (see *Publications: “SERI book ‘Was verträgt unsere Erde noch?’*”).

Kurier, January 21, 2007

“Das weiße Gold wird immer kostbarer“



A report on the negative effects of climate change on Austrian winter tourism.

Agrarische Rundschau, No. 1, 2007

Motivation statt Angstmache

[...] Die neue Studie des Sustainable Europe Research Institute (SERI) im Auftrag der AMA Marketing über die Berechnung der CO₂-Emissionen des Transports von ausgewählten Lebensmittelprodukten belegt: Apfel sind hinsichtlich des CO₂-Ausstoßes nicht gleich Äpfel.[...]

A report on results of the project “CO₂ rucksacks of food transport” (see *Finished Projects*) commissioned by AMA.



factorY – Magazin für nachhaltiges Wirtschaften, 02/2007

Wege zum Bruttonationalglück

Eine nachhaltige Entwicklung von Wirtschaft und Gesellschaft erfordert einen deutlich sparsameren Umgang mit den natürlichen Ressourcen, aber auch einen anderen Lebensstil. Weniger ist mehr, lautet die Devise, die durchaus einen Gewinn an Lebensqualität bedeuten kann.[...]

A report on well-being, happiness and resource consumption featuring Jill Jäger and Ines Omann.

Online

derStandard.at/Wissenschaft

SERI @ derstandard.at

Within the science section of the online newspaper derstandard.at SERI has again filled a website on the topic of sustainability with several articles on current issues throughout 2007.

“Wir sind die Firma – Motivation und Partizipation von MitarbeiterInnen – Chancen und Möglichkeiten der sozialen Nachhaltigkeit in Unternehmen“ (Doris Schnepf, March 5, 2007)

“40.000 ÖsterreicherInnen arbeiten in Forschung und Entwicklung“ (Doris Schnepf, April 25, 2007)

“Kernkraft gegen Klimawandel? Oder: Den Teufel mit dem Beelzebub austreiben“ (Mark Hammer, June 4, 2007)

“Höhenflug der Ideen“ (Mark Hammer, July 18, 2007)

“Eine neue Form des Miteinanders“ (Mark Hammer, October 1, 2007)

“Ökologische Verschuldung“ (Mark Hammer, November 6, 2007)

derstandard.at, June 26, 2007

“Aus für das Bio-Gemüse von Prinz Charles“

derStandard.at: *AMA Marketing beauftragte SERI mit einer Studie zu den CO₂-Emissionen bei Lebensmitteltransporten. Dazu wurde ein exemplarischer Warenkorb zusammengestellt. Welche Lebensmittel waren darin enthalten und was war das Ergebnis?*

Lutter: *Es wurden Äpfel, Tomaten, Joghurt, Butter, Weintrauben und Rindfleisch untersucht. Das erstaunlichste Ergebnis waren die extrem großen Unterschiede der verursachten CO₂-Emissionen durch die Wahl der Transportwege und Transportmittel.*

An interview with SERI researcher Stephan Lutter about global food transportation.

ORF Online, March 16, 2007



“CO₂-Pickerl für Obst soll auch in Österreich kommen“

On the discussion about CO₂-stickers for fruit in Austria mentioning results of the SERI project “CO₂ rucksacks for food transport” (see *New Projects*).

Radio



Ö1 Vom Leben der Natur, March 2007

“Ein Maß für den Ressourcenverbrauch. Der ökologische Fußabdruck - Der gesellschaftliche Stoffwechsel“

Stefan Giljum talks about resource use, societal metabolism and the concept of the Ecological Footprint.

Ö1 Dimensionen - Die Welt der Wissenschaft, July 4, 2007

"Nachhaltigkeit messen"

A report featuring Fritz Hinterberger on the subject of measuring sustainability and the ecological footprint.

Television



“The Planet”

A four-part documentary film by the Swedish television company inspired by the book “Global Change and the Earth System: a Planet under Pressure” published in 2004 and based on a 10-year synthesis of the work of international global change research programs. The film rights have been sold to around 50 other television stations worldwide. The film includes interviews with Jill Jäger.

Yes, there were changes in the CO2 concentration over time, but the big changes occur after the start of the industrialized era. And I don't think you can deny that that's a very, very dramatic picture. Perhaps very alarming to a lot of us, simply because it shows us that we have got a situation now which we haven't seen on the earth in the last 400.000 years. (Jill Jäger)



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