

# European Resources Forum 2014

10.–11. November 2014 Eventpassage Berlin

Programme booklet

Umwelt 🎁 Bundesamt

For the Environment

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## Greetings

#### Maria Krautzberger

President | Federal Environment Agency

It is a great pleasure for me to welcome you to the 2014 European Resources Forum in Berlin. Following on from the success in 2012, the German Federal Environment Agency is hosting this conference for the second time. Our aim in doing so is to provide and establish a European platform for discussion of the issue of "sustainable management of natural resources" that fosters in particular the political and



scientific debate on this subject in Europe. The European Resources Forum takes on an important think tank function and supports networking and the initiation of stakeholder alliances. 400 visitors from over 50 countries will participate in the conference. I am looking forward to intriguing contributions, interesting discussions and a fruitful conference.

#### Karl Falkenberg

General Director | European Commission, DG Environment

Now is the time to seize the opportunities offered by a resource efficient Europe and to explore innovative sustainable growth and prosperity pathways. We need to find answers to the various resource challenges if we are to achieve the objectives set out in the Europe 2020 Strategy, while enabling EU citizens to be "Living well, within the



limits of our planet", which is the vision presented in the EU's  $7^{\rm th}$  Environment Action Programme.

I commend the ambition of the European Resource Forum to mobilise political will, and to generate deeper knowledge based on practical experience in order to accelerate the move to a resource efficient, low-carbon and circular economy. More than ever, we need to define realistic and durable policies, projects and investments that will deliver sustainable growth and jobs in Europe and will set the pace for the global transition to a green economy.

## **Dr. Barbara Hendricks**

Federal Minister | Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

Natural resources are the foundation of our economies. However, mankind is placing increasingly excessive demands on our planet's ecological capacities. This is why in future we have to step up our efforts to achieve a sustainable way of life. Resource efficiency helps us secure prosperity and growth while conserving resources. It is a key to Germany's and Europe's future viability.



Our goal must be to decouple prosperity and resource consumption. On the path to this goal we need to hold an open dialogue, and together commit to adopting and implementing clear targets. I look forward to an interesting event and wish the European Resources Forum every success.



## Programme

#### Monday, 10 November 2014

12.00	Registration

12.45 Welcome and opening

Maria Krautzberger  $\cdot$  President, Federal Environment Agency, Germany

#### Plenary session:

**Europe's responsibility for a sustainable use of natural resources Dr. Barbara Hendricks** · Federal Minister for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

**Dr. Maciej H. Grabowski** · Minister of the Environment, Poland **Chris Kuijpers** · Directorate General, Ministry for the Environment, The Netherlands

**Karl Falkenberg**  $\cdot$  General Director, European Commission, DG Environment

 $\mathit{Moderator}$ : Maria Krautzberger · President, Federal Environment Agency, Germany

#### **15.00** Plenary session: **Targets for a sustainable resource use**

Prof. Dr. Ernst Ulrich von Weizsäcker · Co-Chair, UNEP International Resource Panel; Co-President, Club of Rome; Germany
Dr. Marina Fischer-Kowalski · Head, Institute of Social Ecology, Alpen Adria University; member of UNEP International Resource Panel; Austria
Prof. Dr. Arjen Hoekstra · Professor in Water Management, creator of the water footprint concept, University of Twente, The Netherlands
Moderator: Dr. Harry Lehmann · General Director, Division Environmental Planning and Sustainability Strategies, Federal Environment Agency, Germany

#### 16.30 Coffee & tea break

#### **17.00** Plenary session: Natural resources – to whom do they belong?

**Shaoyi Li**  $\cdot$  Head, Integrated Resource Management Unit, United Nations Environment Programme, France

**Silke Helfrich** · Author and Expert on the Commons, Co-founder of Commons Strategies Group, Germany

**Dr. Detlef Schreiber** · Head, Competence Center Environment, Resource Efficiency, Waste, GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit, Germany

Moderator: **Dr. Inge Paulini**  $\cdot$  Secretary-General, German Advisory Council on Global Change, Germany

#### 19.00 Get together

Speech: Wouter van Dieren · Instituut voor Milieu- en Systeemanalyse, The Netherlands

#### Tuesday, 11 November 2014

#### **09.00** Parallel session A: **Resources for the "Energiewende"**

Dr. Harry Lehmann · General Director, Division Environmental Planning and Sustainability Strategies, Federal Environment Agency, Germany
Dr. Manfred Rosenstock · Deputy Head, European Commission, DG Environment, Unit Resource Efficiency & Economic Analysis
Dr. Peter Viebahn · Co-Director Research Group Future Energy Structures, Wuppertal Institute for Climate, Environment and Energy, Germany
Prof. Dr. Arnold Tukker · Director, Institute of Environmental Sciences, Leiden University, The Netherlands
Moderator: R. Andreas Kraemer · Director, Ecologic Institute, Germany

*Moderator*: **R. Andreas Kräemer** • Director, Ecologic institute, Germany

## 09.00 Parallel session B: UNEP's International Resource Panel (IRP) on Decoupling & Circular Economy

**Shaoyi Li** · Head, Integrated Resource Management Unit, United Nations Environment Programme, France

**Prof. Dr. Ernst Ulrich von Weizsäcker** · Co-Chair, UNEP International Resource Panel; Co-President, Club of Rome; Germany

**Prof. Dr. Paul Ekins** · Professor of Resources and Environmental Policy, Director, UCL Institute for Sustainable Resources, University College London, member of UNEP International Resource Panel, United Kingdom

**Prof. Dr. Stephan Bringezu** · Director, Wuppertal Institute for Climate, Environment and Energy, member of UNEP International Resource Panel, Germany

*Moderator*: **Shaoyi Li** · Head, Integrated Resource Management Unit, United Nations Environment Programme, France

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#### **09.00** Parallel session C:

Sustainable development goals and post 2015 process

**Csaba Körösi** • Co-chair of the Open Working Group on Sustainable Development Goals, Permanent Representative Permanent Mission of Hungary to the United Nations

**Dr. Karsten Sach** · Deputy Director General, European and international Policy, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

**Timo Mäkelä** · Director, European Commission, DG Environment, Unit International Affairs, LIFE and Eco-innovation

 $\mathit{Moderator}$ : Bas de Leeuw · Managing Director, World Resources Forum Association, Switzerland

- 10.30 Coffee & tea break at the exhibition area
- **11.00** Short reports from parallel sessions

#### **11.30** Plenary session:

#### Sustainable resource use and the role of the financial system

**Prof. Dr. Paul Ekins** · Professor of Resources and Environmental Policy, Director, UCL Institute for Sustainable Resources, University College London, member of UNEP International Resource Panel, United Kingdom **Dr. Alois Flatz** · ZOUK Capital LLP, co-founder of Dow Jones Sustainability Index, United Kingdom

**Anne Mieke van der Werf** · Director of Energy & Climate, Triodos Investment Management, United Kingdom

*Moderator*: **Dr. Anders Wijkman**  $\cdot$  Co-President of the Club of Rome, Former member of the European Parliament; Vice-Chairman of the Tällberg Foundation, Sweden

#### 13.00 Lunch break

#### 14.00 Plenary session: Resource efficiency in business – experiences from EU member states

Dr. Harald Gründl · Institute of Design Research Vienna, Austria
Paula Eskola · Motiva, Finland
Ander Elgorriaga · Ihobe, Basque Country
Janneke van Veen · Public Waste Agency of Flanders, Belgium
Marissa Lippiatt · Head, Resource Efficient Scotland, Zero Waste Scotland
Dr. Daniel de Graaf · Section Substance-related Product Issues, Federal Environment Agency, Germany

*Moderators*: **Dr. Bettina Rechenberg** • Head, Department Sustainable Production, Resource Conservation and Material Cycles, Federal Environment Agency, Germany; **Dr. Martin Vogt** • Managing Director, VDI Centre Resource Efficiency, Germany

#### **15.45** Plenary session:

How can Europe reach a sustainable use of natural resources?
Gerben-Jan Gerbrandy • Member of European Parliament
Magda Stoczkiewicz • Director, Friends of the Earth Europe, Belgium
Prof. Dr. Reinhard Loske • Former Senator (State Minister) in the State of Bremen, Professor for Sustainability, Witten/Herdecke University, Germany
Dr. Xaver Edelmann • President, World Resources Forum, Switzerland
Dr. Friedrich Hinterberger • President, Sustainable Europe Research Institute; Member of UBA Resource Commission, Austria
Moderator: Dr. Harry Lehmann • General Director, Division Environmental Planning and Sustainability Strategies, Federal Environment Agency, Germany

- 17:15 Summary and conclusion of the conference
- 17.30 End of the conference
- **18.00** Get Together European + National Resources Forum 2014



# **Session description**

# Day 1 Plenary session: Europe's responsibility 12.45 for a sustainable use of natural resources

"By 2050, the EU's economy has grown in a way that respects resource constraints and planetary boundaries, thus contributing to global economic transformation. Our economy is competitive, inclusive and provides a high standard of living with much lower environmental impacts. All resources are sustainably managed, from raw materials to energy, water, air, land and soil. Climate change milestones have been reached, while biodiversity and the ecosystem services it underpins have been protected, valued and substantially restored."

This vision has been formulated in the "Roadmap to a Resource Efficient Europe" published by the European Commission in September 2011. The Roadmap, which is part of the "Europe 2020 Strategy" and its flagship initiative on "A Resource Efficient Europe", outlines how Europe can transform the economy into a sustainable one by 2050. It proposes ways to increase resource productivity and to decouple economic growth from resource use and its environmental impact.

Since then, the EU Commission has proposed further initiatives and action, amongst them, recently, the so-called "Circular Economy Package". Some of the EU member states have published resource efficiency programmes or action plans that are based on the ideas of the Roadmap. Other countries have developed suitable policies and instruments for a resource efficient Europe. Has all homework already been done?

- How can the European member states further improve their cooperation on the issue of sustainable use of natural resources?
- » How can cooperation with actors from business, academia and civil society in the area of resource efficiency be improved?
- » How can the member states jointly further promote this issue at international level?
- » Does the European Union need a concrete target for improving resource efficiency and for reducing per capita resource consumption in Europe?

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Session description 9

## **Dr. Barbara Hendricks**

Federal Minister | Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

Barbara Hendricks has been the Federal Minister for the Environment, Nature Conservation, Building and Nuclear Safety since December 2013. Before that she served as the federal treasurer of the Social Democratic Party beginning in 2007. From 1998 to 2007 she was a Parliamentary State Secretary at the Federal Ministry of Finance. Since



1994 Barbara Hendricks, who has a doctorate in history, has represented her home district of Kleve in the German Bundestag. Prior to that she had gained political and professional experience working for the Deutsches Studentenwerk (National Association for Student Affairs) and in the administration of the Land North Rhine-Westphalia.

From 2001 to 2013 she was a member of the Executive Committee of the SPD. Barbara Hendricks was born on 29 April 1952 Kleve in the Lower Rhine region, where she still lives.

## Dr. Maciej H. Grabowski

Minister of the Environment of the Republic of Poland

Doctor of Economics at the University of Gdansk and Engineer of Navigation at the Gdynia Maritime Academy. In the 1980s, he worked for the Polish Ocean Lines as chief mate. For 18 years, he developed the Research Institute for Market Economics, where he acted as a Vice-President from 1991. His research focused on tax systems, socio-economic

transitions and labour markets. From 1994 to 2000, he lectured at the University of Gdansk. He contributed to the development of the Polish Lisbon Strategy Forum and the Polish Civil Forum.

He took part in the works on the National Development Strategy 2007–2015. Since March 2008, he has been a member of the Board of Strategic Advisers to the Prime Minister of Poland. In November 2008, he was nominated for the post of an Undersecretary of State in the Ministry of Finance, where he was responsible for the tax system. From 2011 to 2013, he was a member of the Polish Financial Supervision Authority, and since February 2013 he has acted as the Spokesperson for Public Finance Discipline.

#### **Chris Kuijpers**

Director General for Climate, the Environment and International Affairs | Ministry of Infrastructure and the Environment, The Netherlands

Chris Kuijpers is Director General for Climate, the Environment and International Affairs at the Ministry of Infrastructure and the Environment (formerly the Ministry of Housing, Spatial Planning and the Environment in the Netherlands). In this position, he is closely involved in



climate policy, ETS, Green-Growth, resource efficiency, biofuels and policy relating to air quality and noise reduction.

Before joining the Ministry in 1995, he worked at Utrecht University and for a management consultancy. Over the past 18 years, he has had various management positions related to environmental and spatial planning policy. He was Director General of Spatial Planning from 2007 to 2012 and Water Management was also added to his portfolio in 2010.

## Karl Falkenberg

General Director | European Commission, DG Environment

Karl Falkenberg has a long experience as a negotiator in the European Commission. He started his career in the Commission as textiles negotiator, has dealt with international fisheries issues and since 1985 with the GATT. In 1990, he served as foreign policy advisor to EU President Jacques Delors, with particular focus on the German unification process. He was involved in the Uruguay Round



negotiations and has been negotiating the telecommunications and financial services agreements in WTO. From 1997 to December 2000 he was in charge of the coordination of all WTO issues. In 2001 he was appointed Director in charge of sectoral trade policies and bilateral trade relations with North America, Japan, the Mediterranean area and the African, Caribbean and Pacific countries and in 2002 Director for Free trade agreements, Agricultural trade questions, ACP. From 2005 to 2008 he coordinated all bilateral trade policies as Deputy Director General. In January 2009, he took up the position of Director General of the Environment, covering the EU's environmental policy in both its domestic and international dimensions.

Karl Falkenberg is a trained economist and journalist.

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## Maria Krautzberger (moderator)

President | Federal Environment Agency

Maria Krautzberger has been the President of the Federal Environment Agency since May 2014. Born in 1954 in Mühldorf am Inn (Upper Bavaria), she studied sociology and English at Munich University from 1973 to 1976 and administrative sciences at Constance University from 1976 to 1979. From 1980 to 1992, she held various positions at the municipality of Wuppertal, including as department



head at the Office for Urban Development and Environmental Protection. She subsequently worked as Senator for the Environment of the Hanseatic City of Lübeck for six years and served as Deputy Mayor for a time during that period. Maria Krautzberger's last position was as Permanent Secretary in the Berlin Senate Department for Urban Development, where she was responsible for transport, environment, nature conservation and urban planning, among other issues, and involved in the introduction of Berlin's low-emissions zone.



# Day 1Plenary session:15.00Targets for a sustainable resource use

The availability and absorption capacities of our planet are limited. At the same time, the issue of equal access to natural resources for people and economies all over the world is receiving growing attention.

The ever increasing use of natural resources is pushing the boundaries of global ecosystems. In the last 30 years, global resource extraction has doubled to approximately 70 billion tons per year. Already today, this substantially exceeds the regenerative capacity of our planet and could threaten the survival of future generations.

In light of this, there is an urgent need to develop new, ambitious strategies and policy options for a sustainable use of natural resources within planetary boundaries.

One possible instrument for a sustainable use of natural resources is the establishment of global resource targets, taking into consideration the additional need for a regional, temporal etc. differentiation.

- » How can quantitative targets for a sustainable resource use be derived in different resource categories?
- » What environmental, social and economic perspectives and arguments must be taken into account in the debate on global resource targets?
- » How can scientific insights on planetary boundaries best be taken into account in defining such targets?
- » What types of indicators could be most suitable to measure progress towards them?
- » How can global distributional justice be assured in the definition of global resource targets?



## Prof. Dr. Ernst Ulrich von Weizsäcker

Co-Chair, International Resource Panel | Co-President of the Club of Rome

Born: 1939

Web: www.ernst.weizsaecker.de

Earlier stations: Professor of Biology, University President, Director UN Centre for Science and Technology for Development, New York, Director, Institute for European

Environmental Policy, President, Wuppertal Institute for Climate, Environment, Energy. 1998–2005 MP, Germany, Chair of the Bundestag Environment Committee. Dean, Bren School for Environmental Science and Management, UC Santa Barbara, California. Publications: 1994 Earth Politics. 1997 Factor Four (w/ A & H Lovins). 2010, Factor Five (w/ K. Hargroves et al).

#### Dr. Marina Fischer-Kowalski

Professor | Institute for Social Ecology, AAU

Marina Fischer-Kowalski founded and was long-term director of the Institute of Social Ecology in Vienna, where she teaches as professor of the Alpen Adria University. Her background is in sociology (Ph.D. at Vienna University). She has taught at Griffith (Australia), Roskilde (Denmark), Yale University (USA) and the Universidad Federal de



Rio de Janeiro (Brazil). She was president of the International Society of Industrial Ecology, and currently she is President of the International Society for Ecological Economics. As expert member of UNEP's International Resource Panel, she became lead author to its publication, "Decoupling resource use and environmental impacts from economic growth" (2011). She is interested in social metabolism across history, on global, national and local scales, and investigates how it relates to social dynamics (quality of life, equity, division and quality of labour, time use) and to environmental change. She works on transitions in complex systems and engages in transdisciplinary sustainability research. Currently, she is partner in the FP7 project WWWforEurope.



Professor in Water Management | University of Twente

Arjen Hoekstra (1967) is Professor in Water Management at the University of Twente. He is the creator of the water footprint concept and established the interdisciplinary field of Water Footprint Assessment (WFA), which addresses the relations between water management, consumption and trade. He founded Water Footprint Network (WFN) in



2008 and currently sits in WFN's Supervisory Council. Hoekstra's publications cover a wide range of topics related to water management and sustainability. His books, translated in several languages, include The Water Footprint of Modern Consumer Society (Routledge, 2013), The Water Footprint Assessment Manual (Earthscan, 2011), Globalization of Water (Wiley-Blackwell, 2008) and Perspectives on Water (International Books, 1998). Hoekstra has a broad international network, lived in Europe, Asia and Africa and visited over fifty countries. He has led a variety of interdisciplinary research projects and advised governments, civil society organizations, companies and multilateral institutions. He developed various educational tools, including the River Basin Game, the Globalization of Water Role Play and the Water Footprint Assessment E-learning Course.

#### Dr. Harry Lehmann (moderator)

General Director of Division I "Environmental Planning and Sustainability Strategies" | Federal Environment Agency

Since 2004, physicist Dr. Harry Lehmann is head of the division "Environmental Planning and Sustainability Strategies" of the Federal Environment Agency. After working in the field of fundamental research in physics, he founded and owned 1984 the Engineering Consultancy "UHL Data" for systems analysis and simulation in the field of energy



and environment. From 1990 until 1999 he was at the Wuppertal Institute for Climate, Environment and Energy. Then he founded and was Director of the Institute for Sustainable Solutions and Innovations, at that time he was also Director of Greenpeace International "Solutions Unit". He was an early member of the Factor 10 Club for resource productivity and sustainable use of natural resources and is now the president of it. He is one of the founders of Eurosolar and was there the vice president from 2000 to 2006. Since 2011 he is executive Chairman of the World Renewable Energy Council. Since 1985, Harry Lehmann has been lecturer – amongst others – at the University of Luneburg.

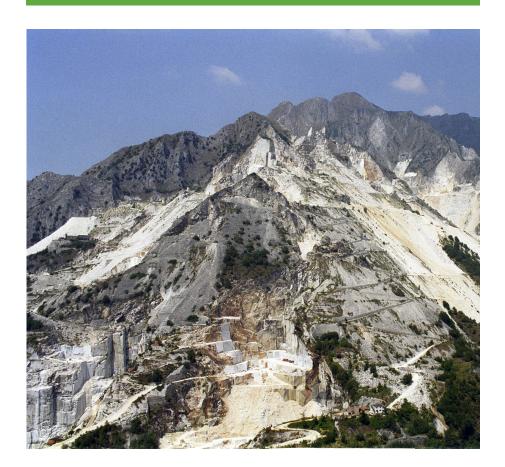
#### Day 1 Plenary session: Natural resources – to whom do they belong?

In the "Brundtland Report", sustainable development is defined as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This implies a fair access to and fair distribution of natural resources and of the benefits arising from them both within the present generation and between the present and future generations. And priority should be given in particular to meeting essential needs of the world's poor.

But so far the use, distribution and access to natural resources are characterised more by disparity and inequality. "Free" resources such as air and water are becoming more and more polluted, non-renewable resources are being depleted without regard to possible needs of future generations, and many people have very limited or no access to urgently needed resources. More and more conflicts and wars are triggered by competition for access to or possession of natural resources. Global consumption and global trade of raw materials have been steadily increasing over the last decades and are clearly dominated by a few countries. Currently just 20 countries are responsible for roughly three quarters of global raw materials consumption, whereas the 100 least-consuming countries together account for only 1.5% of global material extraction. The income and benefits of the use of natural resources such as raw materials and rain forest wood are also very unequally distributed in many countries.

This indicates that the current schemes of governance, ownership and management of natural resources may have to be questioned with regard to whether they are suitable for a sustainable management of natural resources in a global world and which other approaches might be more appropriate. New political arrangements of institutions, instruments and processes might be required. In this context, new forms of cooperative solutions and concepts of international stewardship for common goods instead of individual property rights or state control offer new perspectives for resource policies.

- » Which new political arrangements of institutions, instruments and processes might be required for a more sustainable management of natural resources?
- What role can the concept of global common goods play in this context? Which resources might or should be considered as global common goods?
- Which approaches are suitable to properly address the aspects of intra- and intergenerational justice? Which institutions and political frameworks might be needed?
- How can a better sharing of the benefits of resource exploitation be achieved and how can the so-called resource curse be avoided?



## Shaoyi Li

Chief, the Secretariat of International Resource Panel | United Nations Environment Programme

Mr. Li is Chief of the Secretariat of the International Resource Panel, UNEP, a group of renowned scientists and experts dedicated to sustainable use of natural resources and environment sustainability. He coordinates a number of scientific assessments covering global material flows, metal



and mineral, land/soil and food system, water efficiency and decoupling in urbanization process, which has contributed to policy discourse at the global, regional and national levels on natural resources for sustainable development.

Before joining UNEP in 2010, Mr. Shaoyi LI was Officer-in-Charge, Environment and Development Division, and Chief, Energy Security Section, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). In 1990s and early 2000s, Mr. Li worked for the UN Department of Economic and Social Affairs responsible for the preparation and organization of intergovernmental negotiations and international conferences on sustainable development, policy study on energy and environment including climate change and the management of a number of large technical cooperation projects in the field of energy for sustainable development.

## Silke Helfrich

Journalist & Co-founder | Commons Strategies Group

Silke Helfrich (Jena, Germany) is working on the Commons as an independent activist and author. She has studied romance languages and pedagogy at the Karl-Marx-University in Leipzig. Since mid of the 1990s activities in the field of development politics, from 1996 to 1998 head of Heinrich Böll Foundation



Thuringia and from 1999 to 2007 head of the regional office of Heinrich Böll Foundation in Mexico City focusing on globalisation, gender and human rights. Since 2007 she works as independent author and activist, working with a variety of international and domestic partners. Helfrich is the editor of several books on the Commons, among them: *Who Owns the World? The Rediscovery of the Commons*, Munich 2009, editor of Elinor Ostrom: *Was mehr wird, wenn wir teilen*, Munich 2011. And most recently with Heinrich-Böll-Foundation: *Commons. Für eine neue Politik jenseits von Markt und Staat*, Bielefeld 2012 (together with David Bollier: *The Wealth of the Commons beyond Market and State*, Amherst/MA, 2012). She is the primary author of the German speaking CommonsBlog, co- founder of Commons-Institut e.V. and Commons Strategies Group.

## Dr. Detlef Schreiber

Head | Competence Center Environment, Resource Efficiency, Waste, GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit



Geologist with complementary Latin America studies and PHD in Economic Geology.

30 years of working experience with a focus on environmental policy, climate, geosciences and resource management in

Germany/Europe Latin America, North Africa, Middle East, and Asia:

- » 1982–1989 Exploration of mineral ore, petrol and natural gas
- » 1990–1994 Consulting and advisory services for companies and private business in environmental management, hydrogeology and solid waste management
- » 1994–2001 Senior advisor, GTZ, planning and evaluation missions of international cooperation pro-jects on environmental policy and management, climate change, cleaner production and resource efficiency
- » 1997–2001 Environmental manager of GTZ
- » 2001–2007 Long-term senior advisor in the Technical Cooperation project "Competitiveness and Environment" (CyMA), MERCOSUR-Germany, based in Montevideo/Uruguay

Present position (since 2008): Head of Competence Center Environment, Resource Efficiency, Solid Waste Management; GIZ Division Environment & Climate Change.

» Focus: International Cooperation with developing countries and emerging economies on green economy, environmental policy and economics, resource efficiency, solid waste management, sustainable consumption and production, cities & climate protection, Montreal Protocol, sustainable tourism

## Dr. Inge Paulini (moderator)

Secretary-General | German Advisory Council on Global Change

Inge Paulini holds a diploma in nutrition, a Master of Science in nutrition and a doctorate in biology. From 1993–2008, she worked in the Umweltbundesamt (Federal Environment Agency) in a variety of fields, e.g. environmental toxicology and integrated product policy. She was head of sections dealing with chemical safety and dealing with research and



strategic internal planning. At last, she was head of the department responsible for legal, economic and planning instruments, international environmental regimes, politics and policies and strategies for sustainable development – all covering the sustainable use of resources.



Since 2009, she is secretary-general of the German Advisory Council on Global Change (WBGU). The WBGU was set up by the German federal government as an independent, interdisciplinary, scientific advisory body in 1992, in the runup to the Rio Earth Summit. Some of its principal tasks are to analyse global environment and development problems and to report on these, to elaborate recommendations for action and research and to raise public awareness. WBGU publishes reports and policy papers on many topics relating to global change.

#### Day 1 19:00 Get together

#### **Wouter van Dieren**

Member of the Club of Rome and of the World Academy of Art and Science

Wouter van Dieren is Director of IMSA Amsterdam, a leading European think-tank on sustainability and innovation. Since 1968 he has been engaged world-wide in environmental activities in the fields of management, science, media and politics. He has been awarded with several prizes and honorary functions for his pioneering work in the field of environmental management and sustainability policies.



Autumn 2006, the Golden Rachel Carson medal was awarded to him by the Association of environmental professional VVM, which has two thousand members. The Rachel Carson Medal is their highest award. In that same year, he was also honoured with the Dutch Royal Order of Orange-Nassau, in the high rank of Officer.

Next to being the Director of IMSA Amsterdam, Van Dieren holds numerous other positions. From 1992 till 1997 he has been Vice-Chairman of the international Advisory Board of the Wuppertal Institute in Germany. Between 1978 en 1988 he was the Vice-President of Ecoropa, the European Ecological Association.

## Day 2 Parallel session A: 09.00 Resources for the "Energiewende"

A focal point of German energy and climate policy, the "Energiewende" harbours potential for synergies, but also for trade-offs, with resource policy.

While transforming the energy system towards renewable energy and better energy efficiency will significantly reduce the need for fossil energy sources, it will strongly depend on and increase the use of resources needed for renewable energy technologies and infrastructures (e.g. for wind turbines and batteries for electric vehicles, retrofitting buildings).

Relevant synergies and trade-offs between the two policy areas exist with regard to resource use in the building sector, in energy provision and energy infrastructure, and in the manufacturing sector.

Against this background, this parallel session aims to discuss synergies and further need for action. Experts from policy and science will present strategies and research that highlight the scope and the potential for synergies between energy and climate policy and resource policy.



- In what areas do potential trade-offs and synergies between climate/ energy policy and resource policy on the German and the European level?
- » How could potential synergies be better utilised? How could potential trade-offs be minimised?
- » Which could be promising ways forward in resource policy?

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Session description 21

#### **Dr. Harry Lehmann**

General Director of Division I "Environmental Planning and Sustainability Strategies" | Federal Environment Agency

Since 2004, physicist Dr. Harry Lehmann is head of the division "Environmental Planning and Sustainability Strategies" of the Federal Environment Agency. After working in the field of fundamental research in physics, he founded and owned 1984 the Engineering Consultancy "UHL Data" for systems analysis and simulation in the field of energy



and environment. From 1990 until 1999 he was at the Wuppertal Institute for Climate, Environment and Energy. Then he founded and was Director of the Institute for Sustainable Solutions and Innovations, at that time he was also Director of Greenpeace International "Solutions Unit". He was an early member of the Factor 10 Club for resource productivity and sustainable use of natural resources and is now the president of it. He is one of the founders of Eurosolar and was there the vice president from 2000 to 2006. Since 2011 he is executive Chairman of the World Renewable Energy Council. Since 1985, Harry Lehmann has been lecturer – amongst others – at the University of Luneburg.

#### **Dr. Manfred Rosenstock**

Deputy Head of Unit | European Commission

Dr Manfred Rosenstock joined the European Commission in 1993 and is currently Deputy Head of Unit of the Resource Efficiency & Economic Analysis Unit of DG Environment. His main fields of work concern questions relating to the environmental and resource-efficiency dimension of the Community Europe 2020 strategy for smart, sustainable and inclusive growth and its review as well as to the use of

market-based instruments in Member States' and Community environmental policy.

His previous assignments were in the State aids Directorate of DG Competition and the Socio-Economic Analysis Unit of DG Regional Policy.

Before joining the Commission, he studied economics at the J.W. Goethe-University of Frankfurt, Germany, and the London School of Economics, UK from 1982–1987. Thereafter, he worked as a graduate research assistant at the Institute for Public Sector Economics of the University of Frankfurt until 1993, where he obtained a Ph.D. in Economics.

## Dr. Peter Viebahn

Co-director Research Group "Future Energy and Mobility Structures" | Wuppertal Institute for Climate, Environment and Energy

Dr. rer.nat. Peter Viebahn is a systems scientist with almost 20 years experience in material and energy flow analyses, life-cycle assessment, energy and environmental management systems and the economic and ecological evaluation of renewable and new energy technologies. He holds univer-



sity degrees in mathematics and applied systems sciences as well as a PhD in the field of life cycle assessment. At the Wuppertal Institute of Climate, Environment, and Energy he is co-director of the research group Future Energy and Mobility Structures and manages national and European research projects. Besides the topics mentioned above, his research includes agent-based modelling, carbon capture and storage (CCS), concentrating solar power (CSP) and hydrogen and fuel cells. Formerly, he was co-ordinating the energy section of the Netzwerk Lebenszyklusdaten (German Network on Life Cycle Inventory Data) and initialised and co-managed the international scientific network eco-campus.net.

## Prof. Dr. Arnold Tukker

Director | Institute of Environmental Sciences, Leiden University

Arnold Tukker is since 1 October 2013 the Professor of Industrial Ecology and Scientific director of the Institute of Environmental Sciences (CML) at Leiden University for 70% of his time. Until then he was Business line manager Societal Innovation and Economy at TNO, a large not for profit research organization in the Netherlands, where



he retains a 30% position as senior researcher. He further was from 2010–2014 a part time professor of Sustainable Innovation and NTNU, Trondheim, Norway. Arnold set up prominent EU projects in the field of sustainable product design (SusProNet) and sustainable consumption and production (SCO-RE!) and was core member of the 10 Million Euro Dutch Knowledge Network on Sustainable System Innovations. He currently co-ordinates a string of major programs of some 15 million Euro with some 20 key European research institutes in the field of resource-efficiency, a.o. constructing the world's most ambitious and detailed global energy/resource/economic input-output databases and models (EXIOBASE). He authored 6 books, 47 refereed papers and

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7 special issues on sustainability research. He has been engaged with work of the UN on the Green Economy Initiative, the Resources Panel, the Ten Year Framework of Programs on Sustainable Consumption and Production, and Sustainable Development Goals.

#### R. Andreas Kraemer (moderator)

#### Director | Ecologic Institute

Active in sustainable development, environment policy, climate and energy policies for over 20 years, R. Andreas Kraemer has been Director of Ecologic Institute in Berlin since its foundation in 1995. In April 2008, he became chairman of the Ecologic Institute in Washington.



Since 1993, Mr. Kraemer is a Visiting Assistant Professor at Duke University, lecturing on European integration and environmental policy in the Duke in Berlin Program. He is Co-Chairman of the advisory board of OekoWorld, setting criteria for global investment for a group of ethical and 'green' investment funds or mutual trusts, and of Oekom Research, a rating agency specialising in corporate and governmental or 'sovereign' debtors' ethics and sustainability. He is a board member of the Bellagio Forum for Sustainable Development, the Solidarité Eau Europe, the Oekom Verlag, and is a coordinator of the British German Environment Forum.



#### Day 2 99.00 Parallel session B: UNEP's International Resource Panel (IRP) on Decoupling & Circular Economy

The International Resource Panel was established in 2007 to provide independent, coherent and authoritative scientific assessment on the sustainable use of natural resources and the environmental impacts of resource use over the full life cycle and to contribute to a better understanding of how to decouple economic growth from environmental degradation.

By providing up-to-date information and best science available, the International Resource Panel contributes to a better understanding of how to decouple human development and economic growth from environmental degradation. The information contained in the International Resource Panel's reports is intended to be policy relevant and support policy framing, policy and programme planning, and enable evaluation and monitoring of policy effectiveness.

The new International Resource Panel report on decoupling technologies, opportunities and policy options (Decoupling 2) makes the case for improving resource productivity by design, highlighting the need to remove barriers to decoupling, and to unlock investments in innovation. Why is innovation so important for improving resource productivity and moving towards a circular economy? What is the role of policy-makers in facilitating decoupling and enabling new investments in innovation for increased material circularity? How can reverse logistics and remanufacturing help to promote decoupling and the transition from linear to circular business models? How can the transition to a circular economy help society to stay within a safe operating space in terms of global land use?

- Shaoyi Li, Head of the IRP Secretariat, UNEP: Welcome, opening remarks and update on the work of the IRP
- » Ernst Ulrich von Weizsäcker, IRP Co-chair, Co-President, Club of Rome: Decoupling technologies, opportunities and policy options
- Paul Ekins, IRP member, Director, UCL Institute for Sustainable Resources: Policies for resource productivity
- » Stefan Bringezu, IRP member, Director, Material Flows and Resource Management, Wuppertal Institute: Land use requirements and the circular economy
- Panel discussion & interactive Q&A session with the audience (moderated by Shaoyi Li, Head of the IRP Secretariat, UNEP)

## Prof. Dr. Ernst Ulrich von Weizsäcker

Co-Chair | International Resource Panel, Co-President | the Club of Rome

Born: 1939

Web: www.ernst.weizsaecker.de

Earlier stations: Professor of Biology, University President, Director UN Centre for Science and Technology for Development, New York, Director, Institute for European

Environmental Policy, President, Wuppertal Institute for Climate, Environment, Energy. 1998–2005 MP, Germany, Chair of the Bundestag Environment Committee. Dean, Bren School for Environmental Science and Management, UC Santa Barbara, California. Publications: 1994 Earth Politics. 1997 Factor Four (w/ A & H Lovins). 2010, Factor Five (w/ K. Hargroves et al).

## **Prof. Dr. Paul Ekins**

Professor of Resources and Environmental Policy and Director | UCL Institute for Sustainable Resources, University College London

Paul Ekins has a Ph.D. in economics from the University of London and is Professor of Resources and Environmental Policy and Director of the UCL Institute for Sustainable Resources, University College London. He is now Deputy Director of the UK Energy Research Centre, in charge of

its Energy Resources and Vectors theme, and from 2005–10 was Chairman of the UK's National Industrial Symbiosis Programme (NISP), the country's most effective initiative at promoting resource efficiency in industry. He was a Member of the Royal Commission on Environmental Pollution from 2002–2008. In 2011 he was appointed Vice-Chairman of the DG Environment Commissioner's High-Level Economists Expert Group on Resource Efficiency, and in 2012 a member of the European Commission's European Resource Efficiency Platform. Paul Ekins' academic work focuses on the conditions and policies for achieving an environmentally sustainable economy, concerning which he has written numerous books, papers and articles. In 1994 Paul Ekins received a Global 500 Award 'for outstanding environmental achievement' from the United Nations Environment Programme.

### Prof. Dr. Stefan Bringezu

Director | Wuppertal Institute for Climate, Environment and Energy

Stefan Bringezu is Director at the Wuppertal Instutute, heading Research Group on Material Flows and Resource Management, and Professor for Sustainable Reaource management at the Center for Environmental Systems Research (CESR) at University of Kassel where he also cochairs the Sustainable Resources Futures group. Biologist



by training, PH.D. in ecosystems analysis. He worked on chemicals assessment, supply systems and environmental planning; lectured at several universities, initiated scientific networks (ConAccount, cofounder of ISIE), and pioneered on methods such as MFA and derived indicators; member of various advisory boards, Mamber of the International Resource Panel; his main subject is the analysis of the socio-industrial metabolism and related land use and the instruments to sustain resource supply, use and waste management.

## Shaoyi Li (moderator)

Chief, the Secretariat of International Resource Panel | United Nations Environment Programme

Mr. Li is Chief of the Secretariat of the International Resource Panel, UNEP, a group of renowned scientists and experts dedicated to sustainable use of natural resources and environment sustainability. He coordinates a number of scientific assessments covering global material flows, metal and mineral, land/soil and food system, water efficiency and



decoupling in urbanization process, which has contributed to policy discourse at the global, regional and national levels on natural resources for sustainable development.

Before joining UNEP in 2010, Mr. Shaoyi LI was Officer-in-Charge, Environment and Development Division, and Chief, Energy Security Section, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). In 1990s and early 2000s, Mr. Li worked for the UN Department of Economic and Social Affairs responsible for the preparation and organization of intergovernmental negotiations and international conferences on sustainable development, policy study on energy and environment including climate change and the management of a number of large technical cooperation projects in the field of energy for sustainable development.

#### Day 2 09.00 Parallel session C: Sustainable development goals and post 2015 process

As one of the main outcomes of the UN Conference on Sustainable Development 2012 in Rio (Rio+20), a UN Open Working Group (OWG) on Sustainable Development Goals (SDGs) was established to draft a universal set of goals to serve as a basis for the post-2015 development agenda.

In July 2014, the OWG completed its task by proposing a set of 17 goals including the goal to "protect, restore and promote sustainable use of ter-

restrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" (Goal 15) and to "ensure sustainable consumption and production" (Goal12) with a target "by 2030 (to) achieve sustainable management and efficient use of natural resources" (Target 12.2).



- » Which are the most important SDGs and key issues for the post-2015 development agenda with regard to the reduction of the consumption and efficient use of resources?
- » What were the main lines of discussion in the OWG concerning the preservation and use of natural resources?
- » With focus on resource use, what has to be done at European and national levels in order to successfully implement a global sustainability agenda as proposed by the OWG?
- » With a special focus on resource issues, how can national and international sustainability agendas be interlinked?

## Csaba Körösi

Ambassador, Permanent Representative | Permanent Mission of Hungary to the United Nations

Ambassador Csaba Körösi has served as Permanent Representative of Hungary to the United Nations in New York since 2010, and as a Vice President of the 66th General Assembly. He was elected as co-chair of the Open Working Group on Sustainable Development Goals in 2013.



Ambassador Körösi joined the Hungarian Ministry of Foreign Affairs in 1983. During his career in the Hungarian foreign service, he served in multiple roles, including Deputy State Secretary for Multilateral Diplomacy and Ambassador to Greece (2002–06). His diplomatic postings included Tripoli, Abu Dhabi and Tel Aviv. He is the recipient of the Phoenix Order of Greece and the Order of Merit of Poland, of Hungary and of the Sovereign Maltese Order.

Ambassador Körösi graduated from the Moscow State Institute of International Relations and attended post-graduate courses at the University of Leeds, the Hebrew University in Jerusalem and the Kennedy School of Government at Harvard University. He was a visiting lecturer at the NATO Defense College in Rome and is a frequent lecturer at Corvinus University and ELTE University in Budapest. He speaks English, French, Arabic and Russian.

## **Dr. Karsten Sach**

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Deputy Director General "European and international Policy" | Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety



Dr. Karsten Sach, born in 1959, is Deputy Director-General for European and international Policy in the Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety in Germany. Before he assumed that office in 2004, he led the Division "International Cooperation, Global Conven-

tions, Climate Change" for five years. Since 1999 he is the German chief negotiator at the UNFCCC conferences of the parties. He entered the Environment Ministry in 1991, first at the division for water protection law, but soon changed to climate protection issues. From September 2008 till August 2014 he was Chairman of the Management Board of the European Environment Agency. He participated in the foundation of the International Renewable Energy Agency (IRENA), first as the Chair of the preparatory process, from 2009 to 2011 as Chairman of the Administrative Committee and from June 2013 to May 2014 as Chairman of the IRENA Council. Before joining the ministry, Dr. Karsten Sach was teaching environment and economic law. He studied law in Kiel and Freiburg and has a PhD in law. He was born in Schleswig-Holstein, is married and lives near Berlin.

#### Timo Mäkelä

Director | Global and Regional Challenges, LIFE – in DG Environment, European Commission

Before taking up this post on 1 December 2009, Mr. Mäkelä was working as Director – Sustainable Development and Integration – at the DG Environment of the European Commission. His present responsibilities included sustainable development and economic analysis, sustainable production and consumption – including waste manage-



ment, environmental research, science and innovation policies as well as environmental policies for the industry.

After the completion of a Master of Technological Sciences degree at the Helsinki University of Technology, Mr Mäkelä has received a Post-graduate Diploma in Sanitary Engineering from IHE in the Netherlands.

Mr Mäkelä has held a number of posts at the Ministry of Environment of Finland. Furthermore, he has also served as a head of department at the Ministry of Mineral Resources and Water Affairs in Gaborone, Botswana and as a Director at the European Bank for Reconstruction and Development in London. Since 1996, Mr Mäkelä has been employed by the European Commission, as a Head of Unit at the Enlargement Unit of DG Environment in Brussels and as the Head of European Commission Representation in Finland, before his present post.

#### Leida Rijnhout

Director for Global Policies & Sustainability | European Environmental Bureau (EEB)

She has a background in cultural anthropology with more than 30 years of experience in international development and sustainability. For many years, she facilitates and coordinates the global NGO community in their engagement in UN processes on Sustainable Development and Environment. For that reason she was heavily involved



at the Summit on Sustainable Development in 2002 (Johannesburg) and at Rio+20 in 2012 (Rio de Janeiro), and UNEA 2014 (Nairobi) including all the preparatory meetings. At the moment she coordinates, as Organising Partner for

the UN, the input of the global NGO society in the definition of the future SDGs and governance for SD. She is the European Focal Point for NGOs in Europe, in the 10 year Framework of Programmes on Sustainable Consumption and Production (UNEP). And she is the representative for the Environmental NGOs at the OECD.

Before she switched to Sustainable Development, she worked for 15 years in international cooperation, with special focus to rural development in Latin America (Bolivia). She was responsible for the implementation and evaluation of several rural development programs in Bolivia and advised in the establishment of local credit systems and local food processing.

## Bas de Leeuw (moderator)

Managing Director | World Resources Forum

Bas de Leeuw is Managing Director of the World Resources Forum (WRF), based in Switzerland. Before joining the WRF in 2011 he was Executive Director of the Donella Meadows Institute, Vermont, USA and diplomat for the United Nations Environment Programme (UNEP) in Paris (1998–2009), where he led initiatives such as the Marrakech Process on Sustainable Consumption and Production, International



Life Cycle Panel, and International Resource Panel. He has set up the UNEP/ Wuppertal Institute Centre on Sustainable Consumption and Production.

Bas has worked as a national expert for the OECD, for which he drafted a policy document on sustainable consumption policies, and has held various positions in the Dutch government (Ministry of Economic Affairs resp. Ministry of Housing, Spatial Planning and Environment) between 1985 and 1991.

Bas de Leeuw is a Dutch economist from the Rotterdam Erasmus University and is a Board member of Global Action Plan International, Union of International Associations, and expert at Swiss Academy of Engineering Sciences.



#### Day 2 Plenary session: Sustainable resource use and the role of the financial system

The second European Resources Forum intends to continue the discussion started at the first European Resources Forum in 2012 about the financial system as a possible main driver for sustainable resource use.

The financial sector has a major impact on the economy. Its products and services and especially investments have important leverage for global resource use. Compared with other corporate sectors, however, the financial sector has been slow to develop its role and responsibilities in advancing sustainability, especially resource efficiency. Only in recent years, institutional investors have begun to develop initiatives and more and more rating agencies are questioning the sustainability performance of the financial sector.

Moving towards a more resource efficient economy will also require significant investments in activities that produce more value with less resource consumption. The involvement of investors will be one of the main challenges for a development towards a more resource efficient and more sustainable economy and society. The better integration of sustainability considerations into investment decisions will also contribute to the longterm stability of the financial sector itself.

- » How can financial markets contribute to resource efficiency and sustainable development? Which policy and regulatory instruments and approaches are needed?
- » What is the role of institutional investors in promoting and supporting a more resource efficient economy? What could be suitable performance indicators to measure progress?
- » How can we get investors better involved? What concrete steps could be taken to encourage capital flows into more resource efficient investments?
- » How can the long-term perspective be better internalised into the financial system?

## Prof. Dr. Paul Ekins

Professor of Resources and Environmental Policy and Director | UCL Institute for Sustainable Resources, University College London

Paul Ekins has a Ph.D. in economics from the University of London and is Professor of Resources and Environmental Policy and Director of the UCL Institute for Sustainable Resources, University College London. He is now Deputy Director of the UK Energy Research Centre, in charge of its Energy Resources



and Vectors theme, and from 2005–10 was Chairman of the UK's National Industrial Symbiosis Programme (NISP), the country's most effective initiative at promoting resource efficiency in industry. He was a Member of the Royal Commission on Environmental Pollution from 2002–2008. In 2011 he was appointed Vice-Chairman of the DG Environment Commissioner's High-Level Economists Expert Group on Resource Efficiency, and in 2012 a member of the European Commission's European Resource Efficiency Platform. Paul Ekins' academic work focuses on the conditions and policies for achieving an environmentally sustainable economy, concerning which he has written numerous books, papers and articles. In 1994 Paul Ekins received a Global 500 Award 'for outstanding environmental achievement' from the United Nations Environment Programme.

## **Dr. Alois Flatz**

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#### Partner | ZOUK Capital

Alois Flatz has over 20 years of experience in investment management with a main focus on sustainability. From the Partner level, Alois has helped build several international investment managers focused on the sector. He has built and exited high growth companies such as SiC Processing, one of the most successful European cleantech investments of recent years. Before joining Zouk, Alois was a Partner



and Head of Research at SAM Sustainable Asset Management in Zurich, where he co-founded the Dow Jones Sustainability Index. Alois was also Managing Partner of BTS Investment Advisors, a private equity advisor in India, and an advisor to the Austrian Ministry of the Environment. Alois is a published author and speaker on sustainable and cleantech investing. Alois is currently a Partner at Zouk Capital, a leading private equity investor with €600 million under management. Zouk operates on a dual-track strategy focused on cleantech growth capital and renewable energy infrastructure. Alois coordinated the fundraising of Cleantech Europe II, which at €230 million is the largest cleantech growth capital fund in Europe. He sits on the boards of va-Q-tec and The

Mobility House. Alois holds a PhD in Business Administration from the University of St. Gallen, an MBA from Vienna University of Economics and studied International Management at HEC in Paris.

#### Anne Mieke van der Werf

Director Energy & Climate | Triodos Investment Management B.V.

Anne Mieke van der Werf (1971) is business line manager of the department Energy & Climate. She has considerable experience in business development, corporate and project financing and institutional investments. Anne Mieke worked on renewable energy project evaluations, divestments of several companies, financial and resource planning for both corporations and non-profit organizations.



Before joining Triodos Investment Management in 2012, she founded GreenEconomics, an investment advisory firm focused on renewable energy start-ups and energy generating projects. Previously, she was a business developer at Shell Renewables and worked at the treasury department of Shell Asset Management. Anne Mieke has a degree in macro-economics from Maastricht University and is a RBA (CFA equiv).

#### Dr. Anders Wijkman (moderator)

Co-President of the Club of Rome, Former member of the European Parliament; Vice-Chairman of the Tällberg Foundation

Anders Wijkman is an opinionmaker and author. He is co-president of the Club of Rome and chair of he Swedish Association of Recycyling Industries. He is a senior advisor to the Stockholm Environment Institute.



Anders was a Member of the European Parliament from 1999–2009, where his focus was on issues related to environment, energy and climate, development cooperation and humanitarian affairs. Prior to his election to the European Parliament, Anders served as Assistant Secretary-General of the UN and Policy Director of UNDP, Director-General of SAREC – Swedish Agency for Research Cooperation with Developing Countries, Secretary-General of the Swedish Society for Nature Conservation and Secretary General of the Swedish Red Cross. Anders is a member of the Swedish Royal Academy of Sciences and the World Future Council. Anders was recently appointed member of the Sustainability External Advisory Council of DOW Chemicals.

Anders is honorary doctor at Linköping University (2011). He is the author of several books. His most recent book "Bankrupting Nature" – with co-author Professor Johan Rockström – was published by Routledge in November 2012.

## Day 2 Plenary session: 14.00 Resource efficiency in business – experiences from EU member states

Resource efficiency is one of the main challenges the European Union is facing at the moment. For European companies, inaccessibility of resources leads to high dependence on imports and higher production costs compared to their international competitors who face less stringent environmental policies. The consumption of material and energy accounts for almost half of the costs that arise in industry. Apart from the potential environmental benefits which resource efficiency provides, it also offers companies opportunities to become more competitive.

Small and medium-sized enterprises (SMEs) often lack the capacity to deal with resource efficiency. Against this background, the session "Resource efficiency in business – experiences from EU member states" aims at understanding the issues that European companies face with regard to resource efficiency. The session seeks to help stimulate knowledge transfer on resource-efficient management between EU Member States and present best practice examples from European SMEs that have taken measures to increase their resource efficiency performance.

- What are the barriers/market failures impeding higher resource efficiency for companies?
- What are the drivers that trigger resource efficiency investments by companies?
- » What are the measures (business practices and strategies) that companies should adopt in order to increase resource efficiency?
- » How can companies monitor/measure their resource efficiency performance?

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#### Dr. Harald Gründl

Chairman | Institute of Design Research Vienna

Harald Gruendl (\*1967 in Vienna, Austria) studied Industrial Design at the University of Applied Arts Vienna and holds a PhD in Philosophy.

In 1995 he set up the design agency EOOS together with Martin Bergmann and Gernot Bohmann. EOOS has become a leading office for furniture design, brand spaces and

design research. In 2008 he founded the Institute of Design Research Vienna which focuses on Design Research and questions of knowledge production in the academic field. It focuses on topics like design history and sustainable design.

Harald Gruendl teaches design theory as well as design practice at several national and international universities and stands for bridging disciplines and open education. He was selected by the international "Learning Network on Sustainability" (LeNS) as coordinator for the German-speaking area and initiated the IDRV's activities on iTunes U. He is author of the books The Death of Fashion. The Passage Rite of Fashion in the Show Window (2007), and The Cooked Kitchen. A Poetical Analysis (2008). Together with IDRV he co-published "Tools for the Design Revolution. Design Knowledge for the Future." (2014).

#### Paula Eskola

#### Expert | Motiva Ltd.

Paula Eskola, M.Sc. (tech.), has worked for 6 years in Motiva as an expert in the field of resource efficiency of products and manufacturing. Motiva is a state owned non-partial expert organisation promoting efficient and sustainable use of energy and materials in Finland. In Motiva she is responsible for the development and implementation of the Finnish Industrial Symbiosis System (FISS) which is a

systematic model for promoting industrial symbiosis on a regional and national level. She has also been responsible for the development of material efficiency audit tools for industry. Prior to this position she worked for 11 years as a research scientist at VTT Technical Research Centre of Finland. Her expertise fields are: material efficiency of industry, industrial symbiosis, environmental effects of material flows and life cycle assessment.

To contact Paula Eskola, please visit Motiva's website at: http://www.motiva.fi/ en/areas\_of\_operation/material\_efficiency



## Ander Elgorriaga

Circular Economy Projects Head | IHOBE, Basque Environmental Agency (Bilbao)

Ander Elgorriaga was born in 1965. He graduates at the Swiss Federal Technology Institute ETH Zürich. He joined IHOBE, the Basque Environmental Agency that supports the Government in developing green economic and market instruments for RE, transferring Know How and managing green public-private partnerships with Industry. After the co-



design of the first Basque Waste Prevention and Management Plan in 1994 he has been leading different programs like the Waste Minimization Office, the first and second Environmental Management Promotion Program for Basque SME (1999– 2004), the Basque Ecodesign Promotion Program 2006. He codesigned the 8 Voluntary Agreements on IPPC sectors and was appointed as Eco-Innovation and Networking Head. Until now he has lead the Ecoeficiency Program for Basque Enterprises 2014, developong the newly created Basque Ecodesign Center,the List of Basque Cleatech with 30% of fiscal deductions, for green support services to 750 SMEs and for knowledge transfer in ecodesign, sustainable building and clean technologies. At this moment he is in charge of projects to get the circularity objectives of the new Basque Materials and Waste Prevention Plan 2020.

#### Janneke van Veen

European Policy Advisor | OVAM – Public Waste Agency of Flanders

Janneke van Veen has more than 10 years of work experience in the field of sustainable development, waste policies and European public affairs. Currently, she works as a European policy advisor at OVAM, the Public Waste Agency of Flanders. She represents Belgium in the EU negotiations on the review of the Waste Package. She is also



actively involved in policy developments on raw materials, resource efficiency and greening the European Semester. Previously, Janneke was a policy advisor in the European Parliament, mainly working on issues in the Environmental, Health and Food Safety Committee. Before that, she worked for two years as a sustainable development consultant for Royal HaskoningDHV and before that four years as a policy advisor sustainable development in the Province of Limburg in the Netherlands. Janneke obtained a Masters in Environmental Policy Sciences at the Nijmegen School of Management in the Netherlands.

#### **Marissa Lippiatt**

Head of Resource Efficient Scotland | Zero Waste Scotland

Marissa Lippiatt joined the organisation in 2009 and leads the Resource Efficient Scotland programme, which was launched in 2013 to provide support and advice on resource efficiency to organisations across Scotland. Marissa brought to Zero Waste Scotland a wealth of business development expertise, having previously worked with Olympus Keymed,



Xerox and Scottish Enterprise, Scotland's economic development agency. With Scottish Enterprise she spent several years based in North America successfully encouraging inward investment to Scotland. Returning to Scotland, she transferred her skills to the third sector managing a small carpet recycling social enterprise. In addition, Marissa has worked as Partnerships Manager with NESTA (the National Endowment for Science Technology and the Arts) to exploit innovative opportunities through collaboration.

## Dr. Daniel de Graaf

Scientific Assistant | Federal Environment Agency

Daniel de Graaf studied biochemistry at the Free University of Berlin and earned his doctorate in 2009 from the Max Planck Institute for Infection Biology in Berlin. Since joining the Federal Environment Agency (Section III 1.4 Substance-related Product Issues) in 2008, he is concerned with fluorinated greenhouse gases which are mostly used as refrigerants in e.g. air conditioning and heat pump

appliances. He coordinated the European Union (EU) INTERREG project SPIN (Sustainable Production through Innovation in small and medium-sized enterprises (SMEs)) from 2009 until 2011 which was co-financed by the Baltic Sea Region Programme. Since 2012, he is responsible for the EU INTERREG project PRESOURCE (Promotion of Resource Efficiency in SMEs in Central Europe) co-financed by the Central Europe Programme which deals with the improvement of resource efficiency in SMEs of the manufacturing sector.



#### Dr. Bettina Rechenberg (moderator)

Head of Department "Sustainable Production, Resource Conservation, Material Cycles" | Federal Environment Agency

Bettina Rechenberg studied biology at the Humboldt University in Berlin and holds a PhD in ecology. Since 1992 she has been working at the Federal Environment Agency dealing with surface water quality and the environmental risk assessment of pharmaceuticals, washing and cleansing



agents and nanomaterials. Since 2010 she has worked as head of the department "Sustainable Production, Resource conservation; Material Cycles". The department focuses on promoting material and energy efficient technologies and processes in industrial branches. Main working areas are also the European information exchange on best available techniques (BAT), waste and wastewater treatment and the improvement of recycling methods and use of recycling material.

#### Dr. Martin Vogt (moderator)

Managing Director | VDI Centre for Resource Efficiency

Martin Vogt holds a degree in Physics from the Humboldt University Berlin and a PhD from the University of Cambridge. From 2004 to 2006 he was a postdoctoral research fellow at Harvard University. From 2007 to 2012 he worked as a technology consultant at the VDI Technology Centre in Düsseldorf, where he coordinated the



National Contact Point Nanotechnology for the 7th EU Framework Programme for Research on behalf of the German Federal Government. Since 2011 he also works at the VDI Centre for Resource Efficiency, a competence centre of the German Association of Engineers (VDI) focussing on promoting resource efficient technologies and processes in small and medium sized businesses. The Centre is mainly financed by the National Climate Initiative of the German Federal Ministry for the Environment. Since October 2013 Mr. Vogt is the Managing Director of the Centre.



# Plenary session: How can Europe reach a sustainable use of natural resources?

#### **Gerben-Jan Gerbrandy**

Member of European Parliament | D66

Gerben-Jan Gerbrandy was elected in 2009 as MEP for D66. He is member of the Parliamentary Committee on Environment, Health and Food Safety and the coordinator for the liberal group (ALDE), a substitute member of the Committee on Industry, Research and Energy, and a substitute member of the Budgetary Control Committee. In addition, Gerben-Jan Gerbrandy is a member of the delegation to the EU-Russia



Parliamentary Cooperation Committee. Gerbrandy is also Rapporteur, or first spokesperson, on Resource Efficiency and Biodiversity. Gerbrandy studied public administration at Leiden University, and at the University of Scranton in Pennsylvania. He began his career as a political assistant to Joris Voorhoeve, former director of the Clingendael Institute. From 1994 to 1998 he was the personal assistant of Doeke Eisma, MEP for D66. After his work as secretary of the Dutch parliamentary group of D66 he was senior political adviser at the Dutch Ministry of Agriculture, Nature and Food Quality.

## Magda Stoczkiewicz

#### Director | Friends of the Earth Europe

Magda Stoczkiewicz is a director of Friends of the Earth Europe since March 2008. She has 13 years of senior management experience in a non-profit organization and advanced knowledge of campaigning on environmental, social and governance issues as well as understanding of human rights and development aspects, coupled with 14 year experience of the intricacies of the EU policy-making



framework. Polish graduated from the Jagiellonian University in Krakow with Master of Art, afterwards continuing with post degree studies in public relations and European affairs. She is one of the founders of environmental organisation in Central Eastern Europe – CEE Bankwatch Network, for which she worked for 12 years.

Friends of the Earth Europe campaigns for sustainable and just societies and for the protection of the environment and unites 31 national European organisations with thousands of local groups. The organisation is part of the world's largest grassroots environmental network, Friends of the Earth International. The office in Brussels coordinates European campaigns and conducts advocacy work in the European Headquarters.

## Prof. Dr. Reinhard Loske

Professor for Sustainability | Witten/Herdecke University

Throughout his working life Reinhard Loske, born in 1959), has been equally at home in the world of politics and academia. With a doctorate in Economics (University of Kassel) and post-doctoral qualification (Habilitation) in Political Science (Free University Berlin), he spent many years at the Wuppertal Institute for Climate, Environment and Energy, where he was responsible for international



climate policy and headed the Institute's Sustainable Germany research group. He currently holds a teaching and research position as Professor for Sustainability and Transformation Dynamics at the University of Witten/Herdecke and is a Senior Associate Fellow at the German Council on Foreign Relations (DGAP). From 1998 until 2007, Reinhard Loske was a Member of the Federal German Parliament and both Environmental spokesperson and Deputy Chairman of the Green Parliamentary Group. From 2007 until 2011, he was Senator for Environmental Affairs, Construction, Transport and Europe for the Free Hanseatic City of Bremen. In 2008, he was awarded the highly regarded Adam Smith Award for Environmental Economic Policy by the "Forum Ökologisch-Sozial Marktwirtschaft".

## Dr. Xaver Edelmann

President | World Resources Forum Association

Dr. Xaver Edelmann studied Physics at the Swiss Federal Institute of Technology in Zurich, Switzerland from 1968 to 1973 and received his PhD there in Technical Sciences in 1985. From 1974 he worked as a research and development scientist at Sulzer Brothers Limited Winterthur, Switzerland, where he later assumed the position as



the Head of Nondestructive Testing at the Corporate Research Department. Additionally he became the Head of Technical Physics and finally the Head of the Department of Applied Sciences. In 1986, he was awarded with the Berthold



Award of the German NDT Society for outstanding contributions in the field of nondestructive testing. Since 1991, he has been a member of the Executive Board of Directors at the Swiss Federal Laboratories for Materials Testing and Research, Empa, where he was the Head of the Information, Reliability and Simulation Technology Department and in addition was responsible for the Energy Research Program. Between 1991 and 2001 he was also a lecturer for technology at the University of St. Gallen, Switzerland. Furthermore from 1996 to 2005 he was President of the Swiss Association for Standardization SNV and he is an Honorary Member of SNV. From 2001–2012 he was President of the Swiss Federal Commission for Metrology.

Since 2003 Dr. Edelmann has been the President of the Swiss Association for Quality and Management Systems, SQS as well as President of the Executive Board of Association Micro- and Nano-Technology of the Euregio Lake of Constance. He is a Member of the Swiss Academy of Engineering Sciences, SATW and Head of the topical platform "Resources and Sustainability". Dr. Edelmann is the founder and current President of the World Resources Forum, WRF.

## **Dr. Friedrich Hinterberger**

President | Sustainable Europe Research Institute; Member of UBA Resource Commission

Dr. Friedrich Hinterberger studied economics at the Johannes-Kepler University in Linz/Austria und received his PhD at Justus-Liebig University in Gießen/Germany. After 2 years of research stays at universities in Italy and the United sates, funded by a Post-Doc-Grant by the German Research Foundation (DFG) he worked at the Wuppertal Institute for

Climate, Environment, Energy as head of the research group onecological economics and economic policy. Since 1999 he has been Founding President of the Sustainable Europe Research Institute in Vienna. Since 2014 he is also senior researcher at the Vienna University for Economics and Business. He published several books (most recently in English: "Growth in Transition") and has been teaching at several universities. He is on the board of the Austrian Chapter of the Clob of Rome.



## (moderator and summary of the conference)

General Director of Division "Environmental Planning and Sustainability Strategies" | Federal Environment Agency

Since 2004, physicist Dr. Harry Lehmann is head of the division "Environmental Planning and Sustainability Strategies" of the Federal Environment Agency. After working in the field of fundamental research in physics, he



founded and owned 1984 the Engineering Consultancy "UHL Data" for systems analysis and simulation in the field of energy and environment. From 1990 until 1999 he was at the Wuppertal Institute for Climate, Environment and Energy. Then he founded and was Director of the Institute for Sustainable Solutions and Innovations, at that time he was also Director of Greenpeace International "Solutions Unit". He was an early member of the Factor 10 Club for resource productivity and sustainable use of natural resources and is now the president of it. He is one of the founders of Eurosolar and was there the vice president from 2000 to 2006. Since 2011 he is executive Chairman of the World Renewable Energy Council. Since 1985, Harry Lehmann has been lecturer – amongst others – at the University of Luneburg.

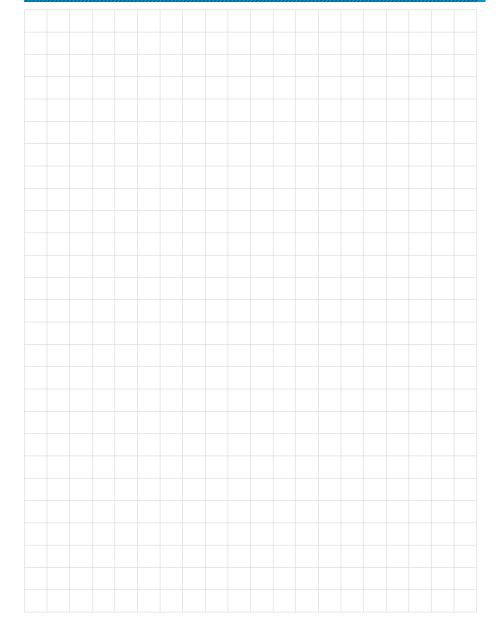


# **List of exhibitors**

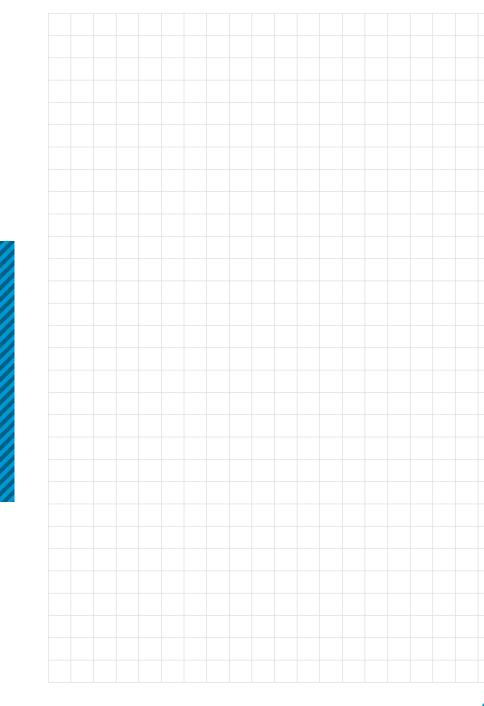
- 1. Federal Environment Agency UBA (Germany)
- 2. VDI Centre resource Efficiency VDI-ZRE (Germany)
- 3. Wuppertal Institute for Climate, Environment, Energy (Germany)
- 4. Finnish Innovation Fund Sitra (Finland)
- 5. EU Project PRESOURCE Promotion of Ressource Efficiency in SMEs in Central Europe (DE, AT, IT, CZ, PL, HU)
- 6. LiveWell for LIFE, WWF-UK (United Kingdom)
- **7.** LOCIMAP The EU Low Carbon Industrial Manufacturing Parks project (The Netherlands)
- 8. World Resources Forum WRF (Switzerland)
- 9. German Advisory Council on Global Change WGBU (Germany)
- **10.** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Department Environment and Climate (Germany)
- **11.** Resource Innovation Network for European Waste ReNEW (UK/BE/DE/IRL)
- **12.** Zero Waste Scotland
- **13.** Ecologic Institute (Germany)
- 14. Project Management Jülich (Germany)
- **15.** technopolis group (Belgium)

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Notes









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