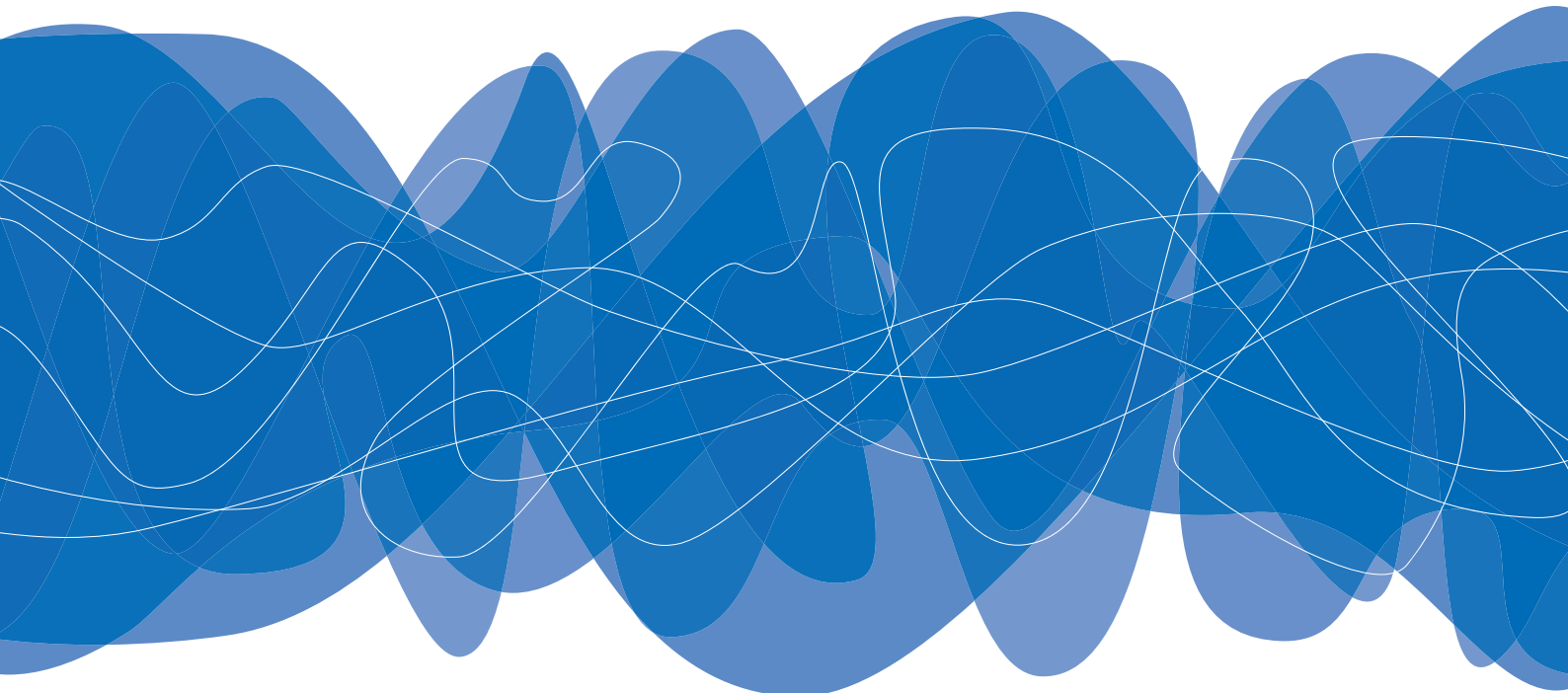


4TH INTERNATIONAL GROWTH IN TRANSITION CONFERENCE

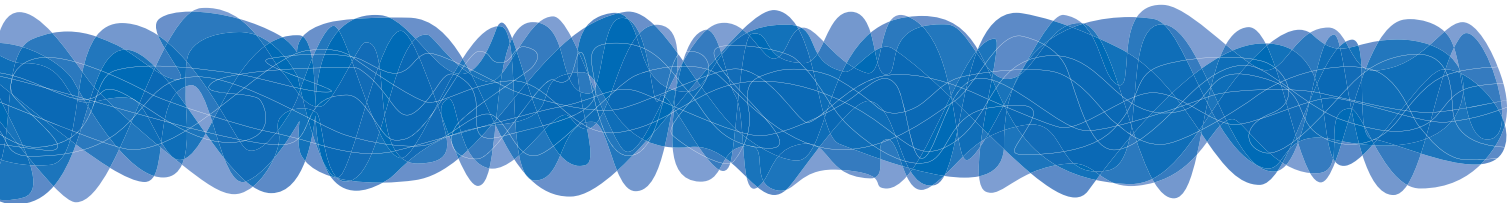
EUROPE'S TRANSFORMATION: WHERE PEOPLE MATTER



CONFERENCE REPORT

14-15 NOVEMBER 2018
AUSTRIA CENTER VIENNA

www.growthintransition.eu/conference2018



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#eugit2018

#growthintransition

facebook: [wiw_conference](https://www.facebook.com/wiw_conference)

PARTNERS



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 This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement No 811144.

CONFERENCE REPORT

INTRODUCTION

The initiative Growth in Transition held its fourth international conference, entitled „Europe's Transformation: Where People Matter", on 14-15 November 2018 at the Austria Center Vienna.

During the two-day event, plenary and parallel sessions featured inspiring speakers from politics, science, civil society and the private sector. Participatory conference formats enabled a dialogue between relevant stakeholders. With Austria holding the Presidency of the Council of the European Union in the second half of 2018, the conference was successful in reaching out to an international audience.

The conference addressed transformation towards a sustainable society from very different perspectives. Conference topics ranged from social and distributional aspects of a fair society to the role of the financial sector in facilitating a sustainability transformation. In order to sustain and increase prosperity and quality of life in the long term, we will need economic strategies that use the planet's resources responsibly. A special focus was put on the sustainable management of natural resource use and the mitigation of climate change. The conference considered what measures need to be taken at national and European level to achieve decarbonisation and a low-carbon society. The role of the media and digitalisation was examined in relation to the challenge of achieving sustainable transformation of society, and the question was posed as to how we might create an encouraging vision of the future.

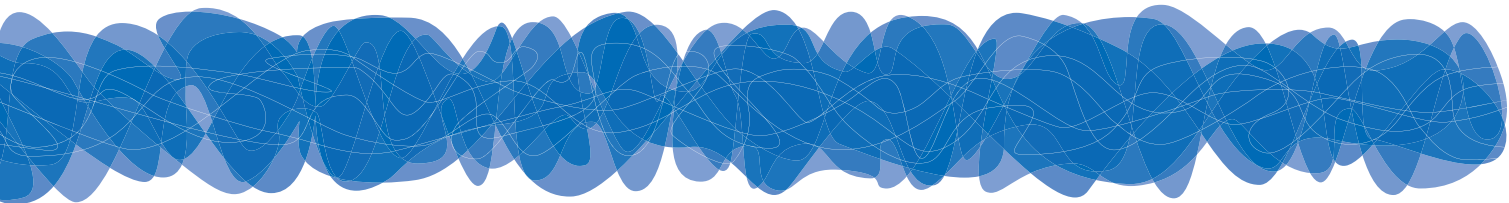
MAIN TOPICS

The Sustainability Transformation in Europe | The Role of the United Nations Sustainable Development Goals | The Societal Challenge of Climate Change and Digital Economy | The Implementation of the Paris Climate Agreement | Social and Ecological Innovation | The Role of Business in a Low Carbon Transition | Circular Economy and Beyond

ABOUT GROWTH IN TRANSITION

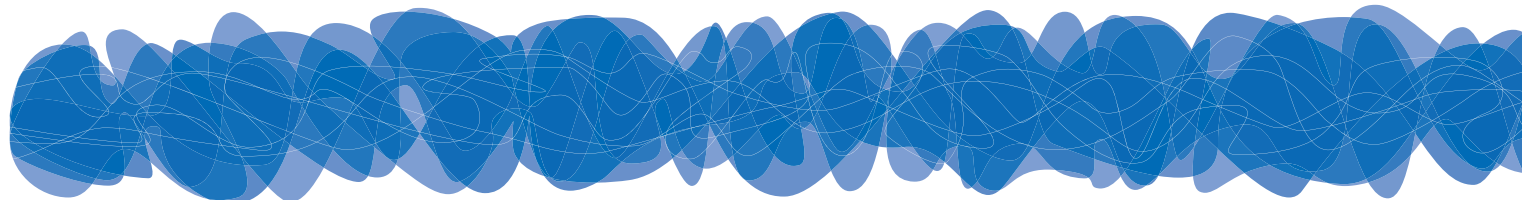
The initiative Growth in Transition, which was launched in 2008, brings together transformation activists and decision makers from politics, science, the economy and civil society and promotes dialogue and an exchange of perspectives on growth, prosperity and quality of life. It provides an international platform which aims to address questions of growth and an alternative, sustainable economy. The initiative is organised by the Austrian Ministry for Sustainability and Tourism.





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WEDNESDAY, 14 NOVEMBER 2018



CONFERENCE OPENING A CONFERENCE WHERE THE PEOPLE REALLY MATTER

Lead conference facilitators were Corinna Milborn and Peter Woodward.

The conference “Europe’s Transformation: Where People Matter” organised by the Growth in Transition initiative took place in the framework of Austria’s Presidency of the Council of the European Union. The aim of the conference was to put the people in the centre of Europe’s sustainability transformation. The ambition for the two-day event was to facilitate a coalition amongst stakeholders from various backgrounds and the involvement of participants in transformative processes and change. Participants were invited to play an active role in discussions during the 25 parallel sessions.

As part of an assessment of the current pace of transition towards a more sustainable future, Peter Woodward gave the audience four questions to consider.

An overwhelming majority of the participants believed that Europe and the world are far away from achieving a sustainability transformation.

The audience was asked how many had already participated in previous “Growth in Transition” conferences, which revealed that about two-thirds were attending the conference series for the first time.

Replies to the question of how the audience would assess European leaders’ action on the transition towards sustainable development ranged from “lagging behind” to “reasonable”.

Replies to the question of what role the initiative Growth in Transition plays in helping shape the debate varied from “reasonable” to “highly influential”.

An ambitious outcome of the conference involved the creation of a draft “Call to Action” and key messages of each parallel session. A draft version of the “Call to Action” was made available to the audience during the conference proceedings and each participant was invited to give feedback/suggestions.



KEY CONFERENCE CHALLENGES

ELISABETH KÖSTINGER

Federal Minister for Sustainability and Tourism of Austria

Elisabeth Köstinger warmly welcomed the audience on behalf of the Ministry for Sustainability and Tourism and all partners within the Growth in Transition initiative. The Minister highlighted that the 4th international Growth in Transition conference was bigger and more international in focus than previous ones and said she was honoured to welcome Ban Ki-moon as keynote speaker.

In 2008, the Growth in Transition initiative was established by the Environment Ministry and the first conference took place. Growth in Transition thus celebrated its 10th anniversary in 2018. Key partners of the initiative include national government agencies and bodies, national and European research institutes and universities, the European Commission, civil society, NGOs and most recently the Ban Ki-moon Centre for Global Citizens. The Growth in Transition initiative provides a *platform* for exchanging innovative ideas and opens up discussion on possible approaches, including private sector, to ensure a sustainable future. To mitigate the most pressing concerns, such as increasing scarcity of materials, climate change, digitalisation or inequality, pro-active approaches and societies that improve the wellbeing of their citizens are needed.

Minister Köstinger stated that it was necessary to debunk the myth that growth is *per se* a negative phenomenon because a transformative perspective to growth unlocks potentials for the economy, the society, environmental protection and natural resources. In this respect, Minister Köstinger quoted former UN-Secretary General Ban Ki-moon: “There is no plan B, because there is no planet B”.

Minister Köstinger noted that the Austrian Government strongly supports the Agenda 2030 and its Sustainable Development Goals and already takes account of these in all governmental actions. She explained that the Austrian government is currently in the process of elaborating an SDG Action Plan that will outline flagship initiatives and measures to be undertaken by the Ministry for Sustainability and Tourism in the coming four years. This process will start within weeks and all sectors of civil society are invited to participate.

Minister Köstinger explained that Austria is currently 9th in the global ranking for progress achieved in implementing the SDGs and highlighted that the goal is to become one of the top 5 countries worldwide by the end of 2022. At the COP24 in Katowice, the international community will come together and the priority is to achieve an ambitious agreement on an effective Paris Work Programme.

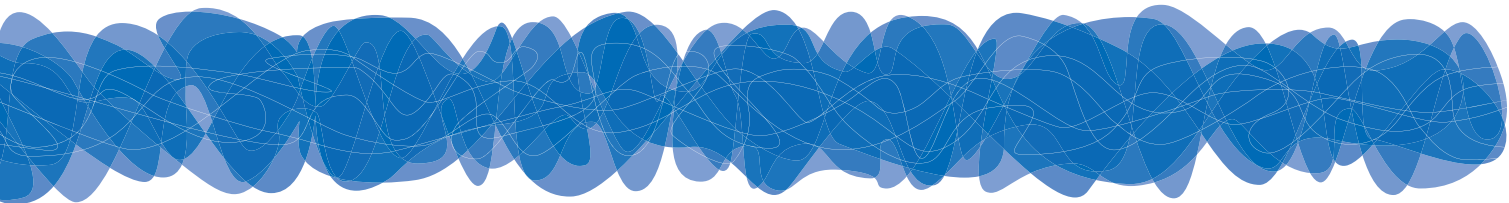
The Minister emphasised the need for an open and inclusive space for dialogue and highlighted that it is people and civil society that are changing the future. The conference aim was to bring together stakeholders from across Europe as well as worldwide, from all parts of society and to create new networks as well as support existing ones. A key focus was to develop specific ideas and recommendations for growth in transition as an outcome of this conference. Minister Köstinger stressed that in this context, the work on the Call to Action, to be handed over to the First Vice President of the European Commission Frans Timmermans, would play a crucial role.

WOLFGANG BURTSCHER

Deputy Director-General of DG Research and Innovation of the European Commission

Wolfgang Burtcher highlighted the urgency of achieving the transition towards a resilient and sustainable society that lives within planetary boundaries. According to the recent IPCC report, reaching the goal of limiting global temperature rises to 1.5 degrees requires far-reaching changes across all governmental levels and all aspects of society, including citizens. He continued by noting that, according to the New Plastics Economy Report by the Ellen MacArthur Foundation and the World Economic Forum, there would be more plastic than fish in the ocean by 2050.

Wolfgang Burtcher stressed that it is now crucial to foster a sustainable development pathway in Europe and worldwide, and the SDGs provide an implementation framework to achieve this. He explained that sustainable development is enshrined in the EU constitution, providing incentives, a regulatory framework and legislative initiatives for the transition to sustainable development. In this



context, key initiatives are the bio economy strategy, the clean energy package, Europe on the Move, the Green Climate Pact, sustainable finance and the mobility and climate change package. Wolfgang Burtscher stated that climate policy is already in place at European level and that a new strategy for greenhouse gas reduction proposed by the European Commission is currently in development.

Wolfgang Burtscher emphasised that research played a crucial role in establishing the Paris agreement and continues to be key to achieving success with this agenda. The EU contributes to the support of research and innovation with the framework programme Horizon2020. 60% of research occurs within the field of sustainable development, and one billion Euros per year have been dedicated to achieving climate action.

The new framework programme for research and innovation is called Horizon Europe and has a mission-oriented approach as well as ambitious goals.

Wolfgang Burtscher stressed that research and innovation must respond to the values, needs and expectations of society in order to address key challenges of our time. On the one hand we need technological innovation to address these key challenges, while on the other, innovation also needs to reflect societal needs, meaning that the direct involvement of citizens in Europe's research and innovation agenda is crucial.

He further congratulated Austria's Presidency for having placed sustainable development so high on the agenda and encouraging proactive discussion among the conference participants.



KEYNOTE
SUSTAINABLE DEVELOPMENT: THE PATHWAY TO THE FUTURE

BAN KI-MOON

Co-Chair of the Ban Ki-moon Centre for Global Citizens and Former Secretary-General of the United Nations

In his speech, Ban Ki-moon described the pathway towards sustainable development as a timely theme, and one which requires a strong sense of ownership among us all.

The world currently faces the challenges of a post-multilateral order. It is confronted by global uncertainties, such as the rise of populism, exponential population growth, a widening gap between rich and poor, and migratory movements. However, there is also a growing sense of interconnectivity between citizens around the world deriving from new technologies including AI, block chain and robotics. Ban Ki-moon emphasised that there should be cooperation and a continued commitment to the implementation of the SDGs and that global citizenship should be promoted to help society cope with these challenges.

Ban Ki-moon highlighted that the SDGs involve by far the most ambitious goals the United Nations have ever produced, creating the pathway towards sustainable development and peaceful prosperity. Ban Ki-moon further noted that it is in everyone's hands to address the most serious challenges to a more sustainable future. The three key areas of this change are the SDGs, climate change, and young people and the role of global citizenship. The SDGs support a world free from poverty, achieving decent working conditions without harming the earth, the availability of essential ecosystems and resources as well as access to clean energy, food and water. Implementing the SDGs requires active participation by everyone, and especially by women and young people. Ban Ki-moon has established organisations such as UN WOMEN or the Special Envoy on Youth and he welcomed the fact that these pressing issues were being supported by world leaders. Because half the world and half the sky are women, they should be given equal rights and fair treatment.

Ban Ki-moon presented his initiative, the Ban Ki-moon Centre for Global Citizens, which he founded together with former President of Austria, Heinz Fischer. The centre aims to empower those who often go unheard to become global leaders.

Ban Ki-moon concluded that it is essential to acknowledge the reality of climate change because nature does not wait for humanity, nor does it negotiate. It is timely to now prepare our communities for the threat of climate change and especially to put the focus on adaption as well as mitigation. Ban Ki-moon added that extreme weather events around the world were clear warnings from nature that communities must adapt to climate change, stressing that there is only plan A and planet A, and no plan B and planet B.

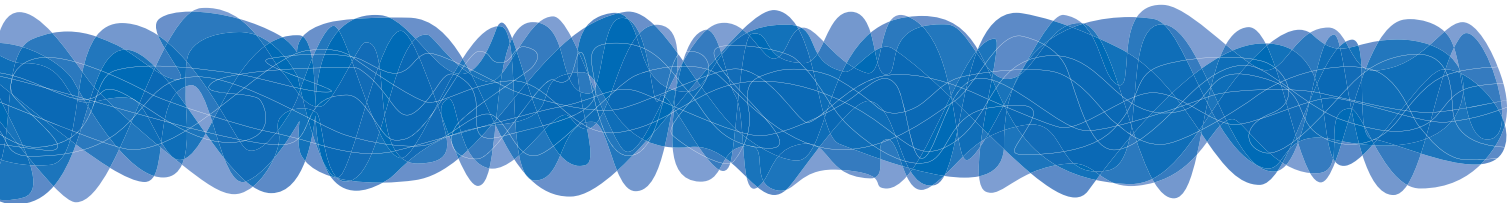
Ban Ki-moon closed his speech with a call to work together on sustainable development and the Paris Climate Agreement to create a common future and ensure prosperity for all: "Let us work together to make this a better world!"

Questions and Answers

During the questions round, facilitated by Corinna Milborn and Peter Woodward, Ban Ki-moon was asked whether, concerning the SDGs, he believed in a multilateral process by the UN to achieve them?

Ban Ki-moon emphasised that science has provided clear evidence that climate change is happening and that the SDGs should not be political issues. Expert panels including scientists, economists and world leaders should all be united in working together because climate change affects the entire spectrum of everyone's lives. It is essential that political leaders should show compassion and it is morally right to help, for example, the Small Island States. He stressed that the European Union should do much more in this regard.

Ban Ki-moon was then asked what characteristics of leadership he would like to highlight and see from political leaders.



Ban Ki-moon stressed that leadership required a strong sense of ownership and that as a global leader, he saw global citizenship as very important. A single country, acting alone, would not be able to solve the problems. He noted a lack of this ownership because of troubling domestic political issues and stated that this would have to be overcome by global leaders.

Another questioner asked what the Growth in Transition initiative could contribute as a network to what needs to be done and, more widely, what people attending the conference could do.

Ban Ki-moon referred to the audience and stated that representatives of NGOs and civil society must make sure that their voices are heard loud and clear by political leaders. He noted the importance of ensuring political leaders are continually challenged and of maintaining tension between civil society and politics.

Last but not least, given the particular focus of this conference on the European dimension, Ban Ki-moon was asked what his distinctive message for Europeans would be? He outlined that the European Union is a group of countries that is respected for upholding the support of global development and the values of democracy, freedom and gender equality. Europe contains some of the wealthiest and most resourceful countries in the world, and people are well educated. The clear message was to not enact wars but build bridges!




POLITICAL PANEL POLITICS, PEOPLE AND TRANSITION

Panel Guests

WOLFGANG SOBOTKA, First President of the National Council of the Austrian Parliament

STIENTJE VAN VELDHOVEN, State Secretary for Infrastructure and Water Management of the Netherlands

Corinna Milborn and Peter Woodward facilitated the panel discussion on **Politics, People and Transition**. The discussion started with a question regarding Stientje van Veldhoven's sense of a sustainability transition and what might be the role of people within this.

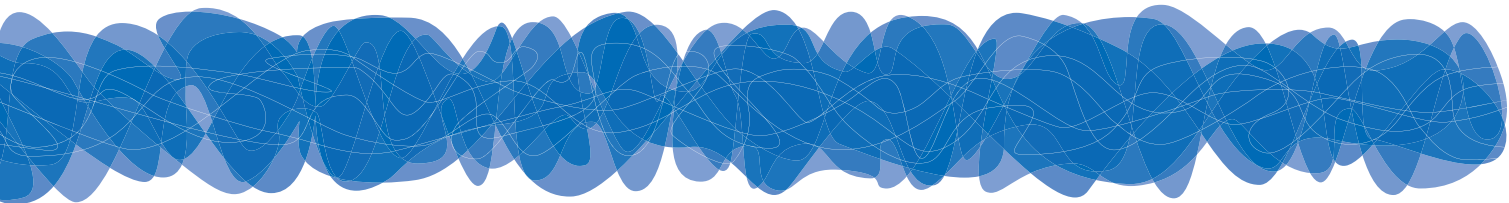
Stientje van Veldhoven states that the pressing issues are how to create an economy with less waste and more reuse, promote more sustainable development and implement circular economy. She noted that forecasts suggested there would soon be 10 billion people on the planet, resulting in an enormous increase of resource use. This meant it was important to make sure that these people will have a sustainable option to choose from. The concept of the circular economy is crucial to achieving this. Stientje van Veldhoven stressed that it is essential that governments, industries, businesses, NGOs and individuals all work together. Multilateralism is also crucial, because change cannot be achieved by countries on their own. She concluded by noting that the world could live without us but that we could not live without the world.

Wolfgang Sobotka replied to the question of what sustainable development indicated for Austria by noting that there were major topics that needed to be addressed jointly by the Austrian government and the economic sector. These topics are climate change and energy, digitalisation and the World Wide Web. Strategies on these topics have been developed and it is the task of the parliament to raise awareness that each and every person must contribute to this. Wolfgang Sobotka stressed that grand ideas and concepts do not reach all people and argued that to achieve a change in behaviour it was essential to work at the scale of small communities and that politics needed to be close to the people.

When asked about how she would encourage citizen participation, Stientje van Veldhoven replied that in the Netherlands working groups for citizens' engagement had been established. When tackling a particular issue, it was important to first take a broad range of aspects into account. Stientje van Veldhoven agreed that it was important that people experience the benefits of sustainability in their own environment. She stressed that a sustainable lifestyle and new technologies need to be easily accessible for everybody. She concluded that personal experiences of sustainability need to go hand in hand with politics.

Wolfgang Sobotka highlighted that various stakeholders needed to be included at the community level and indicated that the political debate was at its most intensive where people were becoming involved. He continued by noting that different strategies had to be employed, depending on the specific characteristics of an area. For example rural and urban areas face different challenges and therefore need different approaches for solutions. He explains that car sharing, for example, is successful in urban areas but is not a suitable option for rural areas. He concludes that solutions must be tailored to the specific needs of regions, that stakeholders as well as experts from different disciplines needed to be involved and that it was crucial to learn how to deal with different opinions.

Concerning the issue that people feel threatened to be part of a transition because their livelihood is embedded in the status quo, Stientje van Veldhoven responded that the real challenge is to make it a win-win situation. She further explained that it is crucial to communicate when moving towards a sustainable future could open up new opportunities. She gave the example that in the Netherlands all coal-fired power plants are to be closed at the latest by 2030, although some plants had only been completed. The government and the energy sector were looking to identify new opportunities and sustainable solutions, such as the use of biomass. The main challenge was not to simply push the agenda through but also to make sure that societal and economic sectors as well as people could join the process. She concluded that these ambitions required leadership and that it was important to incorporate a wide variety of stakeholders to embrace intelligent solutions wherever they are found.



With regards to what examples in Austria for sustainable development might be, Wolfgang Sobotka explained that Austria had abolished nuclear energy and stopped the enlargement of the old energy sector. He highlighted the importance of taking individual measures, such as wind farms, into account and noted that although green energy played a role, ways of reducing energy use also needed to be found. For example, home offices might offer a way to reduce energy use while allowing more time for social life. Wolfgang Sobotka emphasised the need of holistic strategies and to take into account the fact that humans are embedded in social and economic structures as well as within the environment.

When asked about the European dimension in discussion about the circular economy, Stientje van Veldhoven highlighted the important role of a unified Europe in terms of its strong market and worldwide exports. She noted that the European Commission, as an independent body looking ahead to the major challenges, plays crucial in driving national politics in this area. She echoed the previous speaker in noting that it was not only important to talk about key challenges but also to deliver solutions to people.

Finally, both panellists were asked what participants could do to challenge politics and persuade politicians to take courageous decisions.

Wolfgang Sobotka stressed the importance of maintaining a sense of balance in politics as well as reaching out to people who still needed to be convinced that change must happen. He concluded that brave decisions by politicians were necessary for bottom-up initiatives to be able to articulate themselves.

Stientje van Veldhoven concluded that it was important to spread the message and to be able to show results, not only at a high level but also in people's everyday lives. It is the task of politicians to demonstrate the urgency of the issue and make courageous decisions, while also making it easy for people to follow these decisions.



DIGITALISATION AND ENVIRONMENT

Session organisers

Federal Ministry for Sustainability and Tourism , Austria, REWE International AG

Moderation

PETER WOODWARD, Conference Facilitator

Speakers

MARCEL HARASZTI, CEO, REWE International AG

STEFFEN LANGE, Postdoc researcher, Institute for Ecological Economy Research

PATRICK KESSLER, President, Swiss Online-Merchants Association

JULIA STONE, Director Digital & Innovations, BILLA AG

PILLE PRUULMANN-VENGERFELDT, Professor in Media and Communication, Malmö University

Short description

The digital economy leads or will lead to a profound transformation of society and the economy. Specific elements of the digital economy – such as online shopping – the opportunities they provide, and the impact on the environment as well as the energy demands they cause were reflected upon in this session.

Five speakers presented their views on digitalisation and environment with a panel discussion about the way forward and a subsequent Q & A session. Moderator Peter Woodward introduced the topic by asking the audience if they had ever ordered something online, to which the vast majority indicated they had by raising their hands. Four speakers were invited to participate in the panel discussion.

Most intensively discussed topics

Two out of the four panellists agreed that there was a need to consume less. From a food retail industry perspective, the third panellist argued that digitalisation has enabled choice and developed tailored choice for consumers.

New ideas contributing to transformation

The key message of this session was that it is important to be aware of the journey towards sustainability. Digitalisation is changing consumer behaviour and is accompanied by rebound effects. We need to be present and considered, or risk simply allowing it – the transition – to happen.

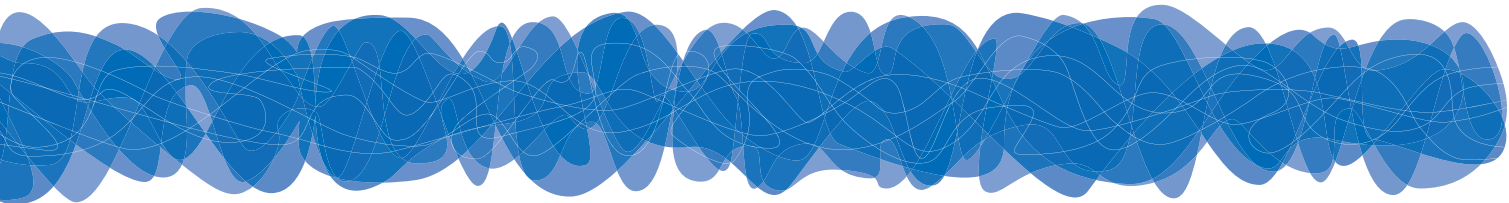
Summary

The University of St. Gallen has drawn a comparison between the amount of CO₂ emissions created through online shopping and physical shopping. The study concluded that there is no clear answer as to which of these practices is better, since this very much depends on particular cases and consumer behaviour. The “last mile” plays an important role. A transformation of these activities from logistics chains to a network is needed, because chains are neither efficient nor intelligent and they can physically collapse, whereas a logistics network could become a form of “controlled chaos”.

It was also argued that efficiency is the great hope of digitalisation; Digitalisation harms the environment, since it uses resources. Compared to the analogue shopping practices, digitalisation does not affect the environment to a significant degree, yet at the same time it does not really help either. This does not mean that digitalisation could not help improving the environment. Hence, we should all exercise responsibility when making decisions to purchase.

Key message and the role of people in transformation processes

Digital tools are consumer enablers and can facilitate mobility. However, the consumer decisions are impacted by factors such as education, experience and social background.



Message

Digitalisation is an enabler.

Recommendation

Digital tools can help, but key drivers for “reasonable consumption” are education, experience and social background.



ECONOMY AND ENVIRONMENT: CHALLENGES FOR A SOCIO-ECOLOGICAL TRANSFORMATION

Session organisers

Vienna University of Economics and Business, Institute for Ecological Economics and Competence Center for Sustainability

Moderation

FRED LUKS, Head of the Competence Center for Sustainability, Vienna University of Economics and Business
STEPHAN LUTTER, Senior Researcher, Institute for Ecological Economics, Vienna University of Economics and Business

Panel Guests

MARTINA SCHUSTER, Federal Ministry for Sustainability and Tourism, Austria
HEIDI LEONHARDT, Research Assistant, Institute for Sustainable Economic Development at BOKU University of Natural Resources and Life Sciences Vienna
SIGRID STAGL, Head of the Institute for Ecological Economic, Vienna University of Economics and Business
STEFAN GILJUM, Head of the Research Group “Global Resource Use”, Institute for Ecological Economics, Vienna University of Economics and Business
EMANUELE CAMPIGLIO, Researcher, Visiting Fellow at the Grantham Research Institute, London School of Economics and Political Science

Short description

The session presented and discussed the results of an extensive report published by the Ecological Economics Institute at the Vienna University of Economics and Business. The report focussed on the major challenges and opportunities at the intersection of the economy and the environment (report published online as part of the conference). Discussion centred on the challenges deriving from the economy-environment interaction to achieving the goal of a socio-ecological transformation towards sustainable development. The session included brief thematic inputs from panellists and a group discussion, identifying issues meriting further research as well as future policy interventions (such as working time reduction, carbon tax, and consumption tax).

Most intensively discussed topics

The most intensively discussed and controversial topic was the policy of working time reduction (WTR), in terms of whether it could lower consumption without cultural changes taking place, whether meaningful jobs were more important than WTR, whether technological change might increase unemployment (and need for WTR), how gender affects working institutions, and whether work might increase in a post-growth society less reliant on fossil energy. Consensus was achieved on the topic of decoupling – that at best relative decoupling of greenhouse gases would be achieved, but that the idea of decoupling was used as the basis for utopian ideas of green growth. On the macro-economic level, the main area of discussion was whether or not to include the concept of debt in macro-economic modelling.

New ideas contributing to transformation

Many transformative and interesting ideas were discussed during the session, including the importance of education, and of new forms of critical education for future transformation (not only for the young, but also further education for adults); the time constraints of current working practices (40 hr/week) on workers being politically engaged and being able to take part in further education; the possibility of WTR aiding transformation measures both in allowing people to access education and in political and societal activities. Differentiated forms of taxation and carbon taxation were also discussed as macroeconomic policy measures to change unsustainable behaviour. The possibility of carbon/time accounting (instead of currencies or GDP) was examined as a way to move the focus from GDP growth and to move away from monetisation.



Summary

After an initial introduction by the moderators and a welcome note by Ms. Schuster, the moderators jointly presented the six themes of the report. The audience divided into groups to discuss the report topics regarding barriers to decoupling, and the policy of post-growth in regards to the chosen theme. The results were relayed to the panel for discussion. The discussion began with transformative learning, including how to empower students to become critical and engaged, and time factors as a barrier to education. Another group focused on sustainable work, discussing, among other topics, WTR as a way of reducing compensatory consumption. Ms. Stagl mentioned the gender aspects of employment. In terms of sustainable production and consumption, Mr. Giljum explained that food and agricultural products represent the sector with the second most heavy environmental impact and that more macroeconomic instruments would be needed to promote consumer incentives. Further topics mentioned by the audience included the real estate sector, construction and the possibility of sustainable transformation in this sector, as well as debt fuelling unsustainable economic growth and macroeconomic scenario modelling. Mr. Giljum stressed the need to seek dialogue with the potential losers from a transition – including workers and societal institutions. Ms. Stagl explained that there is a depressing lack of change because of the unexpected complexity of governance systems and stressed the importance of all actors moving quickly, while Emanuele Campiglio talked about the difficulties of implementing a society-wide bottom-up approach and the importance of an informed, intra-institutional bottom-up approach. Ms. Leonhardt added that transformation was not just about getting prices right, and Ms. Schuster explained that these conferences have always been a space for dialogue, and an open space for multiple concepts of transition. Fred Luks and Stephan Lutter concluded the event.

Key message and the role of people in transformation processes

Message

Technology alone will not do the job. The transformation to sustainable development demands changes in policy, theory, lifestyles, finance, education, and elsewhere.

Recommendation

Transformation needs active, anticipatory policies as well as continued research into diverse open questions concerning the relationship between the economy and environment.



FUTURE CAFÉ: ACTIONS & SOLUTIONS THAT MATTER

Session organisers

Impact Hub Vienna

Moderation

Barbara Inmann + Impact Hub Team

Speakers

Interactive sessions with the following invited guests and conference participants:

Climate: Paul Chatterton (WWF) | Johannes Naimer-Stach (Climate-KIC) | Lisa Brandstetter (Scheuch Foundation) | Herbert Schlossnikl (Vöslauer) | Renate Kepplinger (Austro-Papier) | Karl Kienzl (Environment Agency) | Alexander Kampfhammer (Value)

Inclusive Society: Annika Lindblom (Secretary-General, Finish National Commissions on Sust. Dev.) | Michaela Moser (FH St. Pölten, Ilse Arlt Institut) | Gabriele Sonnleitner (magDas Hotel) | Katha Schinking (Habibi & Hawara) | Pablo Solon Romero (Fundacion Solon) | Christine Neubacher (T-Mobile) | Lisa Unterreiner (Deloitte) | Simone Pies (RPunkt management & beteiligungs GmbH)

Digitalisation: Georg Woschnagg (Good) | Florian Sam (VREI) | Robert Rosellen (Microsoft) | Okan McAllister (Students' Impact Initiative) | Markus Raunig (Austrian StartUps) | Michael Fellner (Austrian Digitalisation Agency) | Theresa Imre (markta.at)

Circular Economy: Roman Mesicek (FH St. Pölten) | Helene Pattermann (Zero Waste Network) | Reinhard Herok (Herok) | Ernst Gugler (Gugler) | Johannes Kisser (cradle to cradle) | Günter Reifer (Terra Institut) | Laszlo Borbely (Department of Sustainable Development, Romania)

Media: Caja Thimm (Bonn University) | Claus Reitan (Journalist) | Michael Jaysekara (PR Schütze) | Milo Tesselaar (Demokratie21)

Sustainable Finance: Nikolaus Hutter (New Paradigm Ventures) | Nastassja Cernko (Österreichische Kontrollbank) | Martin Spolc (European Commission) | Philipp Haydn (Investor and Entrepreneur) | Lisa Fassl (AAIA) | Loic Van Cutsem (Ashoka) | Vuk Markovic (Senat der Wirtschaft) | Angelika Delen (Mercer) | Klara Kaminski (Environment Agency)

Short description

The Future Café was a participatory format where diverse stakeholders were invited to discuss current challenges. Participants were split in groups, each group tackling one of the following topics: Climate Action, Circular Economy, Digitalisation, Inclusive Society, Sustainable Financing. The groups addressed 3 questions:

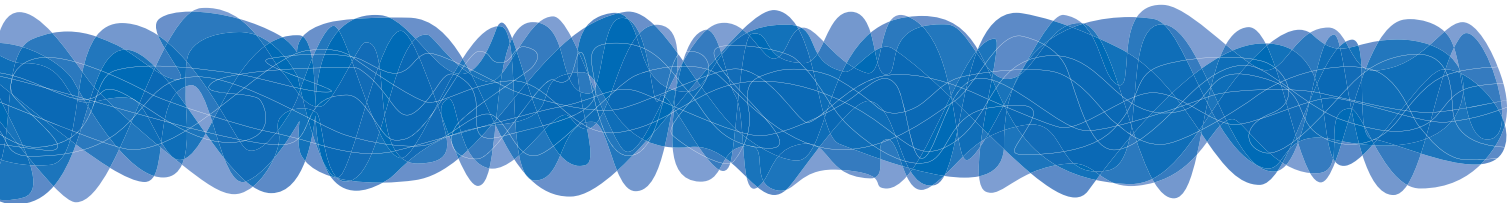
- 1) Your name and the story of your name? What connects you to your table's topic?
- 2) What challenges related to the topic would you solve if you had a magic stick?
- 3) What individual or joint actions can you take to get nearer to where you want to be?

The dialogue format enabled people from diverse backgrounds to get to know one another, map challenges from different perspectives and understand how they can work together in the future.

Most intensively discussed topics

The topics of discussion were: Climate Action, Circular Economy, Digitalisation, Inclusive Society, Sustainable Financing. There was a degree of consensus throughout the groups on the following topics (topic details provided in the summary below):

- We need to change the narrative from negative to positive, e.g. to link finance or climate concerns to opportunity rather than to fear.
- Education and awareness building is a key factor for change.
- Policy frameworks are needed as part of the change process.



Summary

The guided dialogues in this session produced the following recommended actions per topic:

Sustainable Finance

Finance requires change. To achieve this change, the following actions are needed:

- Change the narrative from negative to positive, connecting finance concerns to opportunity rather than to fear.
- Create awareness around sustainable financing and impact investment.
- Exchange knowledge from experts to government, politics, financial institutions to ensure that the right people are on board and know about the tools available.
- Set up education programmes **around sustainable financing / impact investment**.
- **Re-define what growth** means in the context of growth for society.
- Empower change-makers through sustainable investment and communicate best practice examples.
- Re-think the process of investment and the use of different financing instruments.

Circular Economy

- Change the growth paradigm and create a different measurement for growth (not only GDP-based but well-being / sustainability based).



“GREEN” OR “BROWN” INVESTMENTS – ANOTHER BUBBLE IN THE MAKING?

Session organisers

Sustainable Europe Research Institute, Oesterreichische Nationalbank
Club of Rome – Austrian Chapter

Moderation

FRANZ PARTSCH, Director Treasury Department, Oesterreichische Nationalbank

Speakers

FRIEDRICH HINTERBERGER, President, SERI – Sustainable Europe Research Institute
ANITRA NELSON, Honorary Associate Professor, Centre for Urban Research at RMIT University in Melbourne
WOLFGANG PINNER, Chief Investment Officer, Socially Responsible Investment, Raiffeisen Capital Management, Vienna
ARMON REZAI, ASSOCIATE PROFESSOR, Institute for Ecological Economics, Vienna University of Economics and Business
LUKAS STÜHLINGER, Chief Financial Officer, Oekoström AG

Short description

The financial community has reluctantly taken an interest in global warming. The insurance sector is directly impacted by climate change. While insurers have to deal with the resulting physical risks on the liability side of their balance sheets, they need to tackle transition risks on the way toward a low carbon economy on the asset side. In contrast, banks are more indirectly hit by climate risks, but the associated risks are increasingly recognized at the board level. However, the transition to a sustainable development model also offers opportunities for the financial system. After all, managing risks and mobilizing funds belongs to its core business. Investment in infrastructure for renewable energy, intangible investment in skills and research as well as measures to improve the energy efficiency of the existing capital stock will require an estimated 180 billion euro per year in Europe alone.

Most intensively discussed topics

Do investors believe in “green” or “brown” growth? Do they foresee sustainable development or more of the same in terms of resource overconsumption and climate change? If financial markets are right reflecting investors’ predictions about the economic future, the 2015 Paris climate agreement is not worth the paper it’s written on. Yet, if they are wrong, the burst of a brown investment bubble might trigger a new financial crisis. To square the circle, “green” investments must move mainstream. What are investors still waiting for? And: can finance be “green” at all? Economists and practitioners will try to give answers to these questions.

New ideas contributing to transformation

Early this year, several central banks from all over the world founded a new international Central Banks and Supervisors Network for Greening the Financial System (NGFS) in Paris. This network raises awareness not only for the financial risks posed by climate change and related policies, but also for the huge opportunities that the transition toward a low-carbon economy offers to finance. Another recent initiative is the Task Force on Climate-related Financial Disclosures (TCFD), committing major actors in the financial industry to develop voluntary, consistent climate-related financial risk disclosures providing information to investors, lenders, insurers, and other stakeholders. And last but not least, in March, the European Commission launched its Action Plan for Sustainable Finance. It proposes a unified EU classification system of sustainable investment, EU labels for green financial products, clarified duties of asset managers and institutional investors to advise their clients.



Summary

Green finance is getting more and more attentions in banking, insurance and security finance, says Franz Partsch in his introduction. While at the beginning various initiatives were based on exclusion criteria, the market increasingly follows the best in class approach. Using fewer resources and serious action against climate change can lead to more jobs, positive economic development and a high quality of life, explains Friedrich Hinterberger. Respective policies allow economic and social innovation to happen in the first place, while continuing with “Business as Usual” could have detrimental effects: climate change, food prices, unemployment would rise.

We might organize ourselves without monetary principles or state governance to collectively meet our basic needs. This was the key message by Anrita Nelson. A different economy and a sustainable relationship between society and nature requires more democracy, local and regional self-sufficiency, more exchanges not dependent on money, and global equality and sharing.

In my opinion, sustainability and responsibility are important elements for the selection of investments, said Wolfgang Pinner. We should „give our money a fair chance to deliver sustainable yield.“ Responsibility in investment decisions includes the environmental and social factors, targeting stakeholders such as employees, customers or suppliers.

Unanticipated climate policy curbs the value of physical capital that is costly to adjust. Armon Rezaï illustrates this by showing that climate policy to keep peak global warming below 2°C depresses the share prices of oil and gas majors and their market capitalization, curbs exploration investment and oil and gas discoveries, boosts proven reserves left abandoned in the crust of the earth, cuts exploitation investment, and induces an earlier onset of the carbon-free era.

I work for oekostrom AG because I want to make a difference and shape our future in a positive way, said Lukas Stühlinger. There is no alternative to the energy transition – oekostrom AG gives people the opportunity to participate in this development: As a customer, as a shareholder or simply as a prospective customer in the matter. A stake in oekostrom AG represents an ecological-ethical investment. They sell shares in proprietary trading without listing on the stock exchange. As a result, oekostrom AG enables stable performance and free trade among private individuals.

Key message and the role of people in transformation processes

All participants, while coming from very different domains although all related to the economic/financial sector, were very committed to the aim of a “green” transformation. The financial sector has just started to live up to its responsibility. While it can definitely contribute to a smooth transition to a sustainable economy, it cannot substitute the task of politics.

Message

While empirically there is no clear trend towards a “green” future, those present were very active in supporting transition away from “brown” investments.

Recommendation

Green finance needs an appropriate regulatory framework and market participants who not believe in a “green” future but also behave as such.



SCIENCE IN TRANSITION

Session organiser

Alliance of Sustainable Universities in Austria

Moderators

HELGA KROMP-KOLB, Center for Global Change and Sustainability, BOKU University of Natural Resources and Life Sciences Vienna

GERALD STEINER, Dean of the Faculty of Business and Globalisation, Danube University Krems

Speaker

ARJEN WALS, Professor of Transformative Learning for Socio-Ecological Sustainability at the Education and Competence Studies Group, Wageningen University

Short description

This session emphasized the need for a transformation in the knowledge system in higher education institutions. If science and higher education are to contribute to socio-ecological transformation and to achieve the SDGs, a paradigm shift is required. Arjen Wals gave an insight into necessary changes in the science and higher education system and the outcomes of the Science in Transition Conference (see below), which had taken place the day before, were discussed in an interactive setting. The aim of the session was to see whether the results corresponded to the experiences of the participants and whether something needed adding.

Most intensively discussed topics

The most intensively discussed topics were the role of education and research and their role for a transition in growth. The results of the Science in Transition Conference were endorsed by the participants:

Transformative, SDG-relevant learning needs were:

- Institutionalisation of SDG-relevant education, e.g. integration in curricula
- Space for experimentation and free thinking, both for educators and learners, to allow for experiences in socio-ecological transformation (e.g. learning settings, qualification of teachers, evaluation)
- Critical reflection, explicit naming and transparent negotiation of power structures

Organisations that are willing to learn in a transformative way themselves. SDG relevant research needs were:

- A dialogue with actors from all societal levels, including students in their role as multipliers.
- Courage for change, empowerment, civic engagement to address current societal problems and the use of the full range of possible action
- Comprehensive re-definition of long-term goals & values, e.g. alternative monitoring and evaluation systems for performance / achievement
- Favourable conditions for SDG-relevant research via networks, incentive schemes and appropriate funding criteria.

New ideas contributing to transformation

Power structures and transgressive learning, i.e. the ability to change / disrupt existing structures, was addressed by Arjen Wals and intensely discussed in the groups. The discussion referred to power structures at the university as well as in society and politics.

In order to do so, courage is needed from scientists to adequately address these topics– although this demand is a challenge for each individual researcher. Courage nowadays is mainly seen among students / young scientist or older scientists nearing retirement, as they feel less vulnerable. This type of courage was called for by representatives from the administration, stating that they needed this type of input from science in order to support their work.



Summary

Thinking and acting in research on SDGs (Sustainable Development Goals)

Arjen Wals gave a presentation on the SDGs as a catalyst for off-the-grid science. Starting from a commodified world, education has to address the right questions, e.g. how can we rethink the idea of growth? Who should and how can a moral compass be provided for innovation and education?

Science is also trapped in growth: e.g. the number of publications is increasing, while the available time to read is decreasing. New modes of science, i.e. citizen science in the broadest sense, should be embraced.

Students studying sustainability can contribute to change. Important competences are e.g. boundary crossing, system thinking, reflection on values for a more holistic way of understanding the world. T-learning, i.e. transformative, transgressive and transdisciplinary learning is required and universities need to become more responsive and reflexive themselves.

Helga Kromp-Kolb presented the outcomes of the Science in Transition conference that had taken place the previous day (see above). The outcomes were discussed in 4 parallel groups and the results presented in the plenum. The conference results were in general approved, with some additions:

Time and space to reflect within higher education is urgently needed, but learning about SDGs should start earlier in education (at primary school). A timely paradigm shift is needed. Research should be based on societal needs, so the science-policy dialogue and participation need to be strengthened, acknowledging different types of knowledge. Along with power structures, the (lack of) independence of academic institutions needs to be critically reflected upon. Indicators for the new transformative research need to be developed, including societal impact, while funding schemes must be modified to meet the research demands for SDG research.

Key message and the role of people in transformation processes

People are central to transformation processes in their role as students, researchers, educators or teachers. Their way of learning, teaching, researching and communicating is vital here.. Additionally, other stakeholders like NGOs, the administration, politicians or the society as a whole, who should be more closely involved through approaches like citizen science or transdisciplinarity, may all take part in this process.

Message

Sustainability challenges ahead call for paradigm shifts in higher education, science and science funding towards integrated, systemic and transformative approaches.

Recommendation

Institutionalize free spaces in higher education institutions for experimentation and critical thinking in research and teaching to achieve the SDGs.



AT THE PEAK OF SOCIAL CHANGE! LEARNING FROM SUCCESS STORIES FOR SOCIAL INNOVATION

Session organiser

Austrian Society for Environment and Development

Moderation

ASTRID REINPRECHT, ÖGUT Austrian Society for Environment and Technology

Speakers

ALEXANDER KESSELRING, Co-Lead Impact Transfer, Ashoka

MARTIN HOLLINETZ, Co-Founder and Board Member, Otelo eGen

INDRA ADNAN, Co-Initiator, The Alternative UK

KATARZYNA BATKO-TOLUC, Co-Founder and Board Member, Citizens Network Watchdog Poland

PETER LASZNIG, Founder of GELA Ochsenherz, currently active in SOLAWI Ackerschön

Short description

The session explored social innovation success factors: What are the factors that make social-ecological transformation initiatives grow and thrive? Five successful ‘changemakers’ told their personal stories in the setting of the “Collective Story Harvest”: During storytelling in parallel sub-groups, workshop participants were instructed to listen to the stories through the lens of specific guiding questions. Afterwards, participants regrouped in sub-groups with those who had had the same guiding question in different storytelling sessions. In these groups, they identified patterns and key insights with regard to the question under discussion, thus diving deeper into the success factors of social innovations. Key insights were then shared in the final plenary session.

Most intensively discussed topics

The following five guiding questions were discussed in the sub-groups: Which opportunities did the storyteller seize and how? What were challenges and obstacles in the story – and which solutions were found? What enabled the growth and success of the storyteller’s initiative? What influenced/supported the storyteller personally to become a ‘changemaker’? And what can we learn from the story about successful social change?

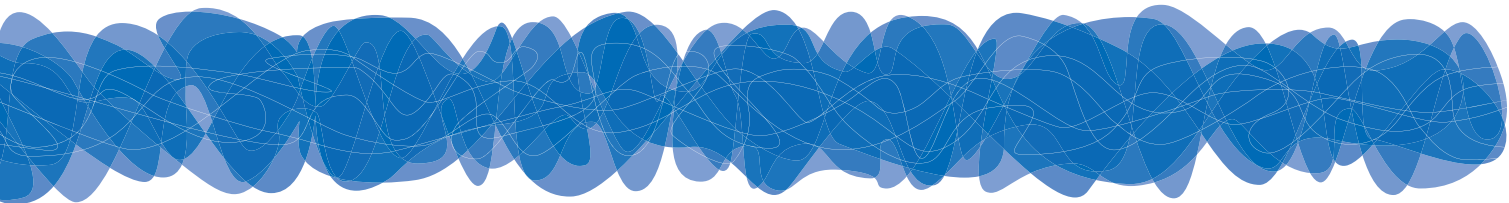
The outcome of the discussions revealed relatively little dissent; it emerged that there were significant parallels between the five “stories of change”. Where answers differed, they were mostly complementary rather than contradictory. Looking at empirical examples thus allows us to define essential patterns of how change can be brought into the world.

New ideas contributing to transformation

While political, economic and social conditions are key to enabling – or hindering – initiatives for socio-ecological transformation, change is ultimately driven by individuals who organise jointly to take things into their own hands. Equipped with motivation, beneficial traits such as perseverance, optimism and courage, a thorough understanding of the problem at hand and the required skills, they can contribute significantly to social-ecological transformation. To empower people to become changemakers, it is crucial to spread knowledge about the success factors that lie within an initiative’s sphere of influence (successful strategies, skills etc.). Establishing an innovation-friendly regulatory environment, which is the responsibility of policymakers, is equally important.

Summary

Based on the guiding questions that were given to participants, discussions in the working groups centred around opportunities, challenges, growth and success factors, personal influences and wider lessons for successful social change in the development of initiatives for socio-ecological transformations.



Where opportunities are concerned, using crises, drawing on the advice from mentors, emulating role models and making use of networks can boost the success of an initiative.

Regarding challenges, dealing with new people, ideas, tools etc. from outside one's comfort zone can be one of the difficulties that need to be addressed.

Crucial issues when it comes to growth and success factors include appealing to people's emotions, offering different roles to people wishing to get involved to cover a wider range of interests, skills, talents and knowledge and experience levels, and having a coordinator on board ensuring enough room for people involved to have a sense of ownership.

As for important influences at the personal level, factors that can spur people to become change-makers are having abundant and diverse interpersonal relationships, knowing and understanding a problem from one's own experience, as well as a person's education and professional background.

And finally, when it comes to wider lessons for successful social change, the discussions showed that it is crucial to maintain momentum for action and to balance the needs of the individual and the needs of the group, to empower people affected by a specific problem, and to have access to relevant infrastructure and resources.

Key message and the role of people in transformation processes

Message

The most important rule for future changemakers is: Organise – find like-minded people to jointly pursue your common cause!

Recommendation

In order to reach people and have impact, we need to communicate differently – not preaching but addressing emotions with stories/narratives. Successful social innovations need passionate founders, active coordinators, conducive enabling conditions, and enough room for ownership by participants/people involved.



ART WORKSHOP: GROWING PICTURES – TRANSFORMATION WITH BRAIN, HEART AND HAND

Session organisers

Wolfgang Weinlich, Professor of Art Education, University College of Teacher Education Vienna; Emmerich Weissenberger and Nora Ruzsic Artist, ArtEmbassy

Short Description

“Growing pictures” was an art workshop enabling participants to use inspiring materials to reflect on the topics of the conference together with the artists’ collective Art Embassy. Personal text and visual responses were transformed into a common work of art through the creation of a flag incorporating these messages as ambassadors of sustainability. The flag was exhibited on day two of the conference.

The general question considered in the art workshop was: Which common human quality is required to be able to address these topics?

Most intensively discussed topics

Most discussion focused on this new setting at a conference, being able to work with science and ecology as the subject of art work. Intensive dialogue took place between those running the workshop and the participants. Some ideas were distilled into simple messages on the flags. These were effective in inspiring more participants to read and reflect upon the ideas of the conference. We received positive feedback on the innovative style of the workshop as well as on the flags that were hung in the main hall.

New ideas contributing to transformation

The session addressed art as a way of reflecting upon society and transition – as a dialogue between art and science. The “Tapp- and Tastkino” (haptic cinema) was among the ideas for connecting people, enabling them to relate to the conference’s 7 key themes in an emotional way, and to leave a message with words and pictures.

Summary

Art has the power to enable very personal reflection, to connect people more closely and to facilitate emotional responses to the conference themes. The connection between brain – heart (emotion) – and hand was a very sustainable idea.

Key message and the role of people in transformation processes

People played an additional, very personal role of reflection. There were many emotional responses relating to all 7 areas of the conference. Transformation could really be felt and not merely treated theoretically, dialogues were able to emerge more easily and allow a broader exchange of individual ideas to take place.

Message

Reflecting upon the 7 main topics in creative/artistic way, we want to use the art workshop to send signals. We transfer our messages onto fabric and become ambassadors for sustainability through the art book medium.



FUTURE WITHOUT NATURAL AREAS? ZUKUNFT OHNE NATURRÄUME

Session organiser

B.A.U.M. – Austrian Network for Sustainable Leadership

Moderation

EVA BERGER, Vice-President of B.A.U.M. – Austria

Speakers

GERTRUD HAIDVOGL, Researcher, Institute of Hydrobiology and Aquatic Ecosystem Management, BOKU University of Natural Resources and Life Sciences Vienna

KERSTIN FRIESENBICHLER, Policy Officer for Nature Protection/Bio-Diversity

JOHANNES PETERSEIL, Environment Agency Austria

BERNHARD KOHLER, World Wide Fund for Nature

GERALD PLATTNER, Nature Management Austrian Federal Forests (ÖBF), B.A.U.M. – Austrian Network for Sustainable Leadership

Sir Karl Popper School students

Short Description

This session, hosted by B.A.U.M.-Austria (an independent environmental initiative and network of entrepreneurs), will focus on SDG 15 (Life on Land). Introductory notes will highlight the current best practices for the sustainable use and protection of natural areas and evaluate chances for advancements. Afterwards, diverse stakeholders will discuss these approaches with regard to their sustainability and articulate necessary need for action. Finally, the importance of natural areas for young people in the face of cyberspace and augmented reality will be discussed.

Summary

Kerstin Friesenbichler highlighted the importance of biodiversity regarding human health, medicine, immune system, etc. and stressed that the loss of biodiversity is 1000-10,000 times higher because of the influence of humans.

She showed the importance of biodiversity and ecosystem services using the example of a walk (forests filter air, water cannot be retained if there is more and more soil sealing, stress declines if you are in the nature, three-quarters of the leading types of global food crops depend on being pollinated by animals (with a market value of about €500 billion/year)) and showed the negative effects on biodiversity (e.g. intensive agriculture, renewable energy with insufficient consideration of possible effects of the locations of power plants on biodiversity, land usage / fragmentation)

Answering the question how the relationship between humans and nature changed in the perspective of environmental history, Gertrud Haidvoogl emphasized the importance of the main energy resource driving the development of nature and societies.

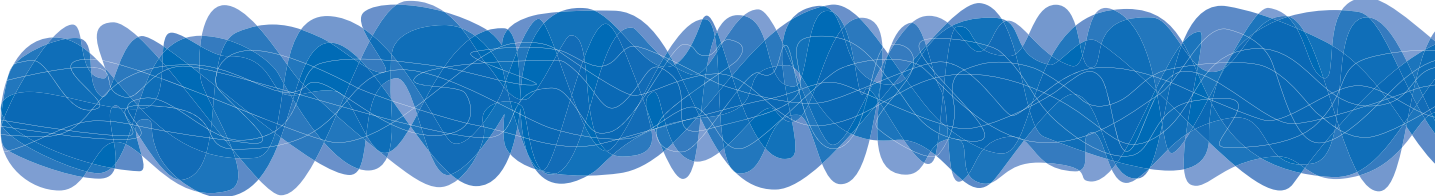
The change from wood to coal allowed for growth on an unprecedented scale (especially in the 2nd half of the 20th century)

- Change from wood to coal: Interdependency between provider and consumers changed; local and regional resources could have been substituted with those imported from far away.
- Positive effects of regulation and progress in the 19th and 20th century: improving hygienic standards, medicine, flood protection
- Side-effects and legacies were not intended but we must deal with them now (ecosystem loss, biodiversity loss, river bed incision, pollution, improvement/maintenance of flood protection)

Environmental history shows that there are many undesired effects of long-term development.

Bernhard Kohler addressed the question of how much space nature needs. He presented SDG 15: protection of terrestrial ecosystems and inland water in accordance with relevant conventions.

Aichi target 11 of the Convention on Biological Diversity (CBD) states that: “By 2020, 17 per cent



of terrestrial and inland water, and 10 per cent of coastal and marine areas are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas”. For IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority.

Aichi targets were to be achievable by 2020: as of 2017, 14.8% of terrestrial areas and 6.3% marine water areas are already protected. In contrast to numerical figures, quality goals for protected areas will not be reached by 2020. Also, according to rapidly accumulating scientific evidence, 17% will by far not be enough to achieve full biodiversity protection. Reasons for loss of biodiversity are agriculture, forestry, hunting, fishing, mining, transportation, climate change, pollution and invasive species.

How much protection do we need? Worldwide, at least 50% of protected areas will be necessary to preserve the existing biodiversity and to maintain the most important ecosystem services (“Nature Needs Half”). The actual situation in Austria (statistics of protected areas (2017)) is that c. 28% of areas are under some form of legal protection, but the question is what percentage really is “effectively and equitably managed, ecologically representative and well connected”? Under the various protection schemes in place, probably less than 10% of Austria’s territory can claim to be located in protected areas that are effectively and equitably managed, and that are ecologically representative and well connected. There is still a huge deficit in the implementation of nature protection at various levels.

Gerald Plattner posed the question of which nature we want to protect. There are three dimensions of sustainability: nature, society, economy. Tree felling over huge areas because of bark beetle, extreme winds, drought, heavy rain has also had economic effects (€15.7 million/year loss of income because of bark beetle and storm-damaged timber)

- Solutions/adaptions: adapting forestry, planting climate change resilient trees, planting or natural regeneration of mixed forests
- Challenges: multifunctional forestry with protection of biodiversity, sustainable resource use and society needs leads to integrative concepts, producing “Ecological Landscape Management” in the forest inventory for all areas managed by federal forests, with integration of biodiversity needs - protected areas, process conversation, habitat network at regional and local level, renaturing opportunities of biotopes and habitats;
- There are complex challenges of different shared approaches that are cross sectoral, not just one-dimensional

Johannes Peterseil addressed the following:

- Presentation of the H2020 project “ECOPOTENTIAL” focusing on supporting protected areas (PA) with regard to future challenges (including global and climate change). The project is funded under the H2020 programme (GA-Nr. 641762) running from 2015-2019. including 48 partners and 25 protected areas (4 of them outside Europe territory),
- Integration of existing sources (earth observation (EO) data as well as in-situ field data) and provision of data in order to support the management of protected areas (-> sensitive to climate change) is an important task
- Two levels: local level (storylines) developed with protection area managers (which data are needed in order to address local management issues); and focusing on cross protected areas to address larger scales
- Stressing the importance of in-situ field data in order to ensure validation of EO data as well as input to model development and calibration. ECOPOTENTIAL provides and further develops EO data products (e.g. Hydroperiod) as well as focusing on the detection of occurrence and type of land cover changes (e.g. EODESM Earth Observation Data for Ecosystem Monitoring).
- Modelling approaches are applied to understand the effects of climate change on habitat suitability and identify threads for protected areas as basis for mitigation measures within protected areas.
- Workflows and data are provided via a “virtual laboratory platform (VLAB)”: tool for protection area managers (models for areas with specific data) to enhance usability and accessibility of the results



The Sir Karl Popper School students looked at the following questions:

1) How have relationships with real nature changed through access to virtual reality?

There is a misapprehension among adults about virtual reality (too expensive); VR cannot replace the experiences in real nature (although augmented reality has a bigger influence)

2) How does urbanisation influence our relationship to nature?

New technologies or urbanisation cannot be replaced; because of urbanisation, there is a stronger need to spend time in nature.

Key message and the role of people in transformation processes

Message

We urgently need to stop the rapid loss of soil and biodiversity (70% of the vertebrates having disappeared within the last 30 years) threatening also the survival of humanity. If we want to protect existing biodiversity and keep up the most important ecosystem services we need to adopt the principle “Nature Needs Half”. Therefore at least 50 % of the planet have to be protected from human interference in various degrees.

Recommendation

Urgently install a strong EU Soil protection legislation with special regard to agriculture and construction activity. Moreover evaluate existing natural areas with respect to their biological value and implement a much higher number of protected areas ranging from category I “Strict Nature Reserve” to category VI “Protected Area with Sustainable Use of Natural Resources”. Strictly control the compliance with the rules in the particular protected area. Support environmentally friendly acting enterprises.



THE MAJORITY IS NOT ENOUGH! – HOW TO DEVELOP SUSTAINABLE INFRASTRUCTURE PROJECTS

Session organiser

Austrian Federal Chancellery

Moderation

Heinz NUSSER, Nusser & Partner – Managing Sustainability

SABINE SCHNEEBERGER, Austrian Federal Chancellery

Speakers

HEIDRUN MAIER-DE KRUIJFF, Managing Director, Verband der öffentlichen Wirtschaft und Gemeinschaft Österreichs – VÖWG

OLIVER GUMPERT, International Business Development, Doppelmayr Seilbahnen GmbH

SABINE GABER, Board Member, Oesterreichische Entwicklungsbank AG – OeEB

ANDREAS GUNST, Partner, DLA Piper

Short description

The session focused on the structural framework and individual readiness required to support the development of sustainable projects worldwide with a special focus on the interaction between public and private sectors, including the SDGs and needs of the stakeholders involved.

The session was divided into two parts: Part 1 was an interactive discussion, where speakers reported from their professional field of activity. Part 2 was a brief hands-on session with participants divided into teams and asked to find a consensus. The topic was the implementation of an irrigation system after drought in southern Iraq. A lack of time after speakers' interesting contributions during Part 1 meant participants did not discuss in detail but were simply instructed about the task and the outcomes.

Most intensively discussed topics

The topics most intensively debated included the balance required between private and public sector to guarantee fair and proper risk distribution, where accountability lies, and new forms of investment.

All speakers agreed that the SDGs require consideration when it comes to planning and implementing any new project. There was also a consensus that all stakeholders need to be taken into account and that traditional models are outdated. However, there were doubts about the required degree of input by government/politics.

New ideas contributing to transformation

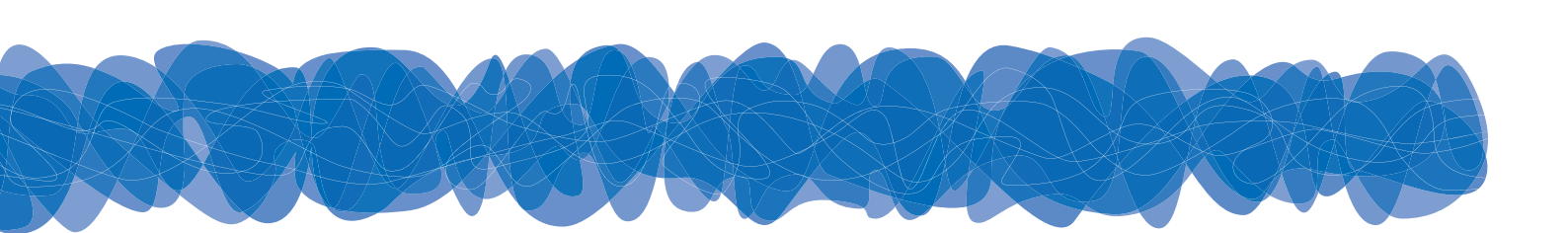
One of the topics that proved most controversial involved the usual form of public-private partnership. Since insurance companies and states will not be able to bear all damages to infrastructures caused by human failure or natural disasters, new strategies and alignments are needed to restrain that the correct parties will be brought to justice.

It was mentioned that various countries, especially emerging countries, lack basic infrastructure, meaning that respective governments need to undertake awareness-building.

A concern was also raised that stakeholders, the government and civil society as a whole should not be forced to implement the SDGs but rather that it was essential to start from a point of respective understanding of sustainability in order to prevent compulsive actions.

Summary

Sabine Gaber stressed that environmental protection is a key part of providing new infrastructure. Unfortunately some countries lack basic infrastructure and a question that often emerges is how to build new infrastructure in those areas. A reasonable goal is to pair the private and the public sectors in terms of financing (PPP).



“Development banks like the Development Bank of Austria OeEB play a critical role in sustainable infrastructure finance in developing countries to unlock private capital and support policy reforms. The scaling-up of public and private investments in low-emissions and sustainable infrastructure has become critical to deliver on Sustainable Development Goals. It is important to reset the financial system in line with long-term climate risks and opportunities. The investment gap and the urgency of the climate challenge present a unique opportunity to enable sustainable growth!”

Andreas Gunst has considered sustainability and the SDGs in his daily since 2006. The implementation of SDGs in a legal sense is not yet common but he foresees improvements in this field. There is also a gap between countries; Great Britain, for example, has stopped PPP (called PFI in Great Britain). A possible solution to implement sustainability within legal aspects could be “Result-based-financing”.

Oliver Gumpert argues that “Deeds not words” might be decisive for future approaches. Sustainable projects that proved their worth may be used as an example for future undertakings. The cable car project in La Paz, which was a very controversial project, turned out to be an improvement for the population in terms of locomotion.

Heidrun Maier de Kruijff stressed that priorities regarding the SDGs must be assigned when financing infrastructure projects. Different countries require different focus areas.

Currently, the state has to co-finance projects to provide basic infrastructure. Companies would not finance them because such projects do not generate profit. The reinvestment of profits is crucial for long-term projects.

Key message and the role of people in transformation processes

Message

Infrastructure must be developed in a sustainable way, taking the SDGs and a better allocation regarding the responsibilities of the public and the private sector into account. Therefore, all stakeholders must be considered in the decision making and their requirements respected. Long-term solutions and rapid action are crucial.

Recommendation

The goal is that future infrastructure projects will include the SDGs; e.g. by establishing sustainable platforms, innovative forms of financing and procurement and a shared overall commitment to the SDGs among all partners.



ARE MEDIA ENCOURAGING TRANSFORMATION?

Session organiser

Ecosocial Forum Austria

Moderation

BIANCA BLASL, Communication expert, Ecosocial Forum

MICHAELA HICKERSBERGER, Editor in Chief “denk.stoff”, Social policy officer, Ecosocial Forum

Speakers

JASMIN GODEMANN, Professor of Communication and Engagement in Agricultural, Nutritional and Environmental Sciences, Justus-Liebig-University of Giessen

CAJA THIMM, Professor for Media Science at the University of Bonn

TOBIAS HOFFERBERT, Media Intelligence, APA-DeFacto

Panel Guests

MARTIN KUGLER, Editor in Chief, Universum Magazine

CORINNA MILBORN, Chief Information Officer, Puls4

CLAUS REITAN, freelance journalist

VANESSA WABITSCH, REVOLVE communication group, Brussels

JULIA WIPPERSBERG, Research & Consulting, APA-DeFacto

Short description

This session focused on the difference between media logic(s) and the requirements for transformation as seen by sustainability activists. After three short presentations, the scientists and journalists on the podium discussed the role of the media in transformation towards sustainability. A specific focus was put on the consequences of algorithms driven by economic interests in social media platforms and the consequences for information diversity and democratic deliberation.

Most intensively discussed topics

Consensus was achieved about the relevance of social media platforms and concern about the impacts on society of the effects of algorithms filtering information for the individual user.

The role of media was the subject of intense controversy. While sustainability activists in the audience demanded that media play an active role in the transformation process, journalists on the podium unanimously claimed that this was not the role of the media in our society.

Some discussants stated that sustainability was no longer a subject that audiences switched off from, while journalists claimed they try to avoid the term. They noted that they would report on single events like droughts but not on climate change per se.

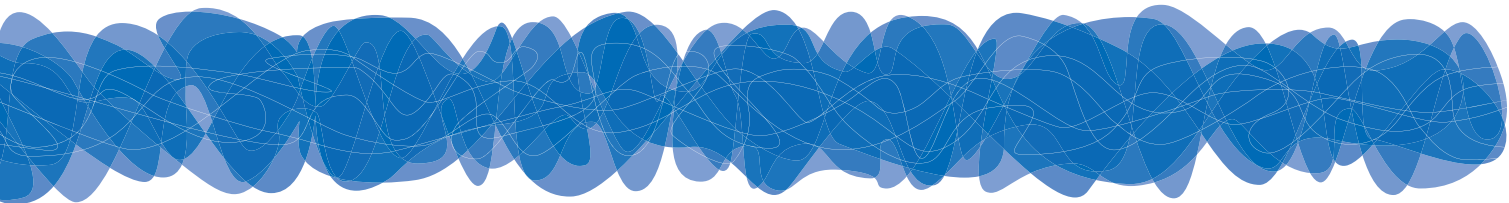
New ideas contributing to transformation

This session revealed the different logics of media practitioners and people engaged in communicating sustainability. Although there is a deep scepticism in the filter function of social media platforms, activists need to understand how the different platforms work, their “surface grammar” (e.g. hashtags, what people see) and “properties grammar” (interests, what people do not see) and to be able to communicate through different channels where this is appropriate to pursue a specific goal. In particular, the power of visual framing of information was highlighted during the discussion.

A particularly interesting point was the notion of establishing an independent European Social Media Platform that is not based on economy-driven algorithms selecting information.

Summary

Tobias Hofferberg presented the results of content analysis regarding the term “sustainability” (Nachhaltigkeit) in Austrian print and online media. The term is mostly used in the areas of food, finance and



industry. Jasmin Godemann stressed that media is shaping our behaviour in terms of consumption. Because of its community function, social media could play a beneficial role by involving people in framing solutions. Caja Thimm stated that different media logics exist. Print, TV and internet, and social media platforms all have formal and informal rules regarding technology, institutions and regulations.

Media channels are underpinned by different logics. Print media is still editorially controlled and has a specific identity. Reaching the people you want is a challenge. Media business relies on gaining attention, which is not possible with terms like sustainability, climate change or SDGs. There must be a connection to peoples' everyday lives. Television channels can cover e.g. food or health issues, because this reflects audience interests.

The role of journalists, as defined by themselves, differs from the one defined by activists. While activists want journalists to perform tasks in transformation (impact journalism), journalists are not aiming to disseminate articles but rather to sell their product.

In social media, sustainability is no longer an audience turn-off. These different platforms may be used to communicate in different ways, and we must understand the different logics to which they correspond (e.g. Instagram has a feelgood atmosphere with no hate speech, in contrast to, e.g., Twitter).

The danger regarding social media is that the platforms choose what people see. They distribute emotion and shape the way we communicate. These platforms have a business-driven logic that instrumentalises hate and negative emotions. The session participants have identified the need for a new media revolution, and we must engage with this.

Key message and the role of people in transformation processes

Media creates communicative practices. It is essential to understand the formal and informal rules that exist in connection with technology, institutions and regulations. Underlying business interests shape communication, and people should be aware of this.

Message

We need to understand media logic(s), to frame our messages correspondingly and point out why sustainability is important to people's lives.

Recommendation

Implement an independent European Social Media Platform that is not based on economy-driven algorithms selecting information.



RESOURCE EFFICIENCY CONTRIBUTIONS TO DECARBONISATION

Session organisers

Austrian Federal Ministry for Sustainability and Tourism;
University of Natural Resources and Life Sciences, Vienna, Institute for Social Ecology

Moderation

STEPHAN LUTTER, Institute for Ecological Economics, Vienna University of Economics and Business

Opening

MARTINA SCHUSTER, Federal Ministry for Sustainability and Tourism, Austria

Speakers

PAUL EKINS, Director of Research and Professor in Energy and Environment Policy at the UCL Energy Institute, London, Member of the Expert Panel of the United Nations International Resource Panel

HELGA WEISZ, Potsdam Institute for Climate Impact Research (PIK), Potsdam

NINA EISENMENGER, Institute for Social Ecology, BOKU University of Natural Resources and Life Sciences Vienna

MARK MEYER, Research Associate, Institute of Economic Structures Research (GWS), Head of Global Developments and Resources, Osnabrück

KATE SCOTT, Department of Geography, University of Manchester

Panel Guest

HELENE DALLINGER, oikos Vienna – Students for Sustainable Economics and Management

Short description

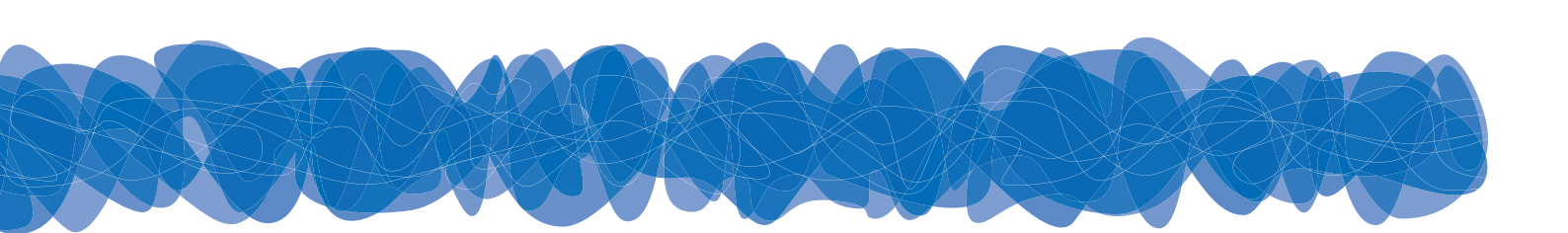
Resource efficiency has been heralded as a policy measure that can contribute to climate protection, yet only a few studies investigate this correlation on an economy-wide scale. According to the UN International Resource Panel, there is a positive correlation between climate and resource policies, meaning that ambitious resource policies enable a significant decline in greenhouse gas emissions and also have positive effects on the economy. This breakout session focused on the assumed relationship between climate and resource policies, including presentations about European, national and international studies on the topic (UN International Resource Panel, G20, Germany, UK, and Austria) as well as a roundtable discussion on the issues presented.

Most intensively discussed topics

All studies agreed: climate protection and resource efficiency go hand in hand, with many synergies. But there is currently no integrated discussion of these two topics. Even models using different assumptions concurred that with extraordinary action, a reduction of emissions within the agreed limits can be achieved. Some showed that the effect of growth would be too large (rebound effect) if no accompanying political measures were taken. Markets alone will not achieve higher rates of resource efficiency by themselves. Other topics discussed included the place of economic growth in transformation discussion: whether discussions around more economic growth were needed, or whether postgrowth ideas were implementable. In any case, decoupling of wellbeing from economic growth is necessary.

New ideas contributing to transformation

The discussions involved many possible efficiency measures (including using less steel in the construction industry as a way of reducing environmental impacts), as well as the importance of the national, EU and supranational policy framework as a way to introduce specific climate proposals (i.e. carbon tax) in order to promote efficiency measures. It was also discussed that climate change mitigation and adaptation might require additional materials use at first, which must be included in modelling future



scenarios. Overall, it was agreed that resource efficiency can, depending on the sector, contribute to the reduction of negative climate effects. The importance of improving product durability and lifetimes to reduce consumption was also discussed.

Summary

Ms. Schuster and Mr. Lutter introduced the session. Paul Elkin focused on the evidence as to why resource efficiency policy must play an important role in carbon climbdown. Resource efficiency could have numerous benefits for the economy and environment, limiting resource extraction. The purpose of policy must be to leave fossil fuels in the ground. The EU's Circular Economy Package (CEP), and G7 Alliance on Resource Efficiency are steps in the right direction, but should be scaled up and made specific (targets, timescales).

Helga Weisz's talk focused on the complexity of linkages between GHG emissions and resource use. De-carbonising the energy system will fundamentally alter material demand, extraction and trade patterns. A warming climate will also change conditions for raw material extraction and use (extremely energy intensive i.e. because of droughts). Without accompanying measures, positive effects of material efficiency improvements are far away from compensating for the income effect.

Mark Meyer showed the results of a global modelling approach (GINFORS). The debated approach (which contradicted the other panellists) used economic mapping, hypothesising that materials and resource decoupling was achievable. The speaker explained that the policy dimension was important in achieving the 2-degree scenario.

Kate Scott presented on how resource efficiency could contribute to meeting UK climate targets: Resource efficiency could help get the UK closer to achieving this, especially in the construction industry, where a 79% reduction in emissions was possible.

Nina Eisenmenger presented an Austrian case study where emissions and materials use in Austria show decoupling of production that was relative but not global or absolute, as high energy input materials and goods are imported.

Helene Dallinger summarised the discussion, highlighting that although resource efficiency was needed, there was no absolute decoupling (which had never been observed in reality). She urged audience and panel to question the imperative of economic growth.

The roundtable discussion focused on the sharing economy and how modelling could help explore the areas in which efficiency measures could be achieved at low cost.

Key message and the role of people in transformation processes

Evidence shows that climate protection and resource efficiency measures are strongly interlinked and influencing each other. In order to meet the 1.5°C target, radical policy measures that integrate both aspects are needed.

Message

Evidence shows that climate protection and resource efficiency measures are strongly interlinked and influencing each other.

Recommendation

In order to meet the 1.5°C target, radical policy measures that integrate both aspects are needed.



BEST PRACTICE EXAMPLES

Session organiser

Federal Minister for Sustainability and Tourism

Moderation

PETER WOODWARD, Conference Facilitator

Speakers

VICTORIA SOELLE, The DO School Innovation Lab, Germany

JULIAN PAUL MELCHIORRI, Founder and CEO of Arborea Ltd., United Kingdom

REET AUS, Founder of Fa. Upmade, Estonia

NKEMDILIM BEGHO, Founder and Managing Director of Future Software Resources (Futuresoft), Nigeria

RODRIGO ARANDA, Co-Founder and CEO of Sintala Design, Spain

MICHAEL FASSNAUER, CEO of UBIMET, Austria

Short description

Six entrepreneurs who are already part of the transition presented their inspiring eco-innovation projects. This session focused on selected cases of eco-innovation that is conclusive and convincing. These are clearly aimed at promoting sustainable development and have achieved either market entry or established significant social recognition. The founders of these start-ups were invited to explain their vision, discuss initial venture capital financing, the risks and operational hurdles involved in their causes and how to overcome them, and to demonstrate the potential for profit as well as key factors for success.

Most intensively discussed topics

Experts and well-known people like Jane Goodall were asked why they are successful, and their answer was to turn theory in practice and start doing. “Just do it!” was the main message of all presenters. Purposeful doing is everywhere in the world; and it needs to be reinforced. zEspecially in the case of Africa, there are hurdles to being a woman in tech business. Although there are many people available, it is hard to find qualified individuals with the requisite skills.

New ideas contributing to transformation

Peter Woodward summed up and noted that all six entrepreneurs have in common that they are working on an area of activity that is moving into transition, and that getting into doing and working through failure until one is successful are important factors for entrepreneurs.

Summary

“Doing” was the common message of the presentations and the discussion. However, the main challenges facing young entrepreneurs are: Obtaining funding at the start | Getting customers | Explaining the benefits to the first customers | The need for a very, very high bar for frustration at the beginning | The need for entrepreneurs to find new ways to reinvent themselves every day.

Key message and the role of people in transformation processes

An eco-innovation start-up creates jobs for new employees, which are so-called “green jobs”. They all contribute valuable project ideas to move onto the right path towards a sustainable future.

Message

Young entrepreneurs need to be able to adapt to day-to-day developments.

Recommendation

Creating an EU-wide market for ICT (compared to the U.S. market) is necessary. More funding for practice-based research is needed.



BRINGING THE SDGS TO LIFE – FROM STATUS QUO TO A SUSTAINABILITY TRANSFORMATION

Session organisers

Environment Agency Austria;

Institute for Managing Sustainability, Vienna University of Economics and Business

Moderation

GERALD BERGER, SENIOR RESEARCHER AND PROJECT MANAGER AT THE INSTITUTE FOR MANAGING SUSTAINABILITY, Vienna University of Economics and Business

Speakers

MARKUS HAMETNER, Senior Researcher and Project Manager, Institute for Managing Sustainability, Vienna University of Economics and Business

ANNIKA LINDBLOM, Secretary-General, Finnish National Commission on Sustainable Development

ANNELIES VILIM, Director, Global Responsibility – Platform for Development and Humanitarian Aid, Member of SDG Watch Austria

Panel guests

NASTASSJA CERNKO, Sustainability Manager, OeKB Group, Austria

FLORIAN WUKOVITSCH, Economist, Austrian Chamber of Labour

Short description

The session explored options for effective implementation of the SDGs for different governance levels and stakeholder groups. Three input presentations assessed how the EU and selected Member States have progressed towards achieving the SDGs over the past five years, provided an overview of the Finnish governance approach for implementing the SDGs, and a critical view from civil society of success factors for SDG implementation and recommendations for better CSO participation. A panel discussion with business representatives and social partners then investigated the role these actors could play in supporting the SDGs in Austria. The session concluded with an interactive discussion with the audience, elaborating critical success factors for SDG implementation.

Most intensively discussed topics

The question of what actions are needed to implement the SDGs at national level was one of the most intensively debated topics during the session. Looking at a successful example from Finland, participants considered a strong political commitment to implementing the SDGs as the single most important success factor. Ideally, this commitment would take the form of an overall national SDG strategy that remains valid even when governments change. Participants considered these two success factors as being by far the most important ones. A third pre-condition for implementing the SDGs was rendering the SDGs more visible through media campaigns.

New ideas contributing to transformation

The participants voiced several ideas that could help us to move towards a sustainable future. One suggestion was to stop talking about individual SDGs and focus on the Agenda 2030 as a document that offers a holistic approach to the sustainability challenges and underlines the interconnectedness of the goals. Another participant from the business sector raised a concern that, despite the willingness of many businesses to consider the SDGs, there is an element of confusion as to how to implement them in practice because of the lack of data and clear implementation guidance. Thirdly, participants raised the idea of a bottom-up approach towards sustainable development: if governments do not take required action, civil society should become more active and take the lead.



Summary

The session began with three input presentations. Markus Hametner talked about the EU response to the SDGs, which includes regular monitoring of progress towards the SDGs in an EU context. The results of the most recent monitoring exercise from 2018 show that, over the past five years, the EU has progressed towards most of the SDGs, with most progress being made towards healthier lives (SDG 3) and better education (SDG 4). The introduction of the SDGs brought more political attention on the monitoring process, but the problem remains that some data sources are unavailable.

Annika Lindblom shared an example of sustainability transition from Finland. The secret of Finnish success is the government's commitment to sustainable development, which led to the adoption of an implementation plan for the 2030 Agenda, as well as the involvement of civil society and other stakeholders through so-called "commitments".

Annelies Vilim, a civil society representative, underlined that the cooperation of public and private sectors and civil society is crucial for creating a decent life for all.

During the panel discussion that followed, Nastassja Cernko from the OeKB group and Florian Wukovitsch from the Austrian Chamber of Labour shared their experiences regarding the changes that the SDGs has brought about in their fields. They stated that before the introduction of the SDGs, both organisations had already had mechanisms in place to assess the development effect of their actions, but that the SDGs had created a better framework and contributed to the bigger picture of development beyond GDP.

The key questions during the ensuing discussion with the audience were (a) which actions are still required for a sustainability transformation, and (b) who should take action. The majority of the participants agreed that strong political commitment is required to create a sustainable future for all.

Key message and the role of people in transformation processes

Message

For successful implementation of the SDGs, what is required is strong political will/commitment and high-level responsibility; a whole-of-government approach, which remains coherent when governments change; and a whole-of-society approach to create societal ownership.

Recommendation

It is recommended to establish a national strategy with regular monitoring; an inter-ministerial coordination mechanism (e.g. committee, with political consensus); and a broad societal platform involving political parties, civil society organisations, business and academia.



SOCIO-ECOLOGICAL TRANSFORMATIONS IN RESEARCH AND POLITICS

Session organiser

Network Socio-Ecological Transformation Research

Moderation

FRED LUKS, Head of Sustainability Competence Center, Vienna University of Economics and Business

Speakers

BEATE LITTIG, Head of the Division Socio-Ecological Transformation Research, Institute for Advanced Studies

CHRISTINA PLANK, Post Doc Researcher, Institute of Social Ecology, BOKU University of Natural Resources and Life Sciences, Vienna

BARBARA COUDENHOVE-KALERGI, works in the area “Education and Society” at the Federation of Austrian Industries

ALEXANDRA STRICKNER, Economist and Co-founder of Attac Austria

ELISABETH FREYTAG-RIGLER, Head of the EU Coordination for Climate and Environment, Federal Ministry for Sustainability and Tourism, Austria

Short description

The term “transformation” has gained much traction in recent years, in addressing problems of unsustainability. Yet, the term is used ambiguously and key issues of unsustainability remain unsolved. The session discussed different understandings of transformation as well as the role of social-ecological transformation research in science and politics. It addressed challenges that have to be faced when “growth in transition” is on the agenda of European societies. Christina Plank presented the Memorandum of the Network of Social-Ecological Transformation, pointing out the necessity for social-ecological research and asking for more research funding in this area. Other speakers described their own perspectives on social-ecological transformation research before a panel discussion with the audience.

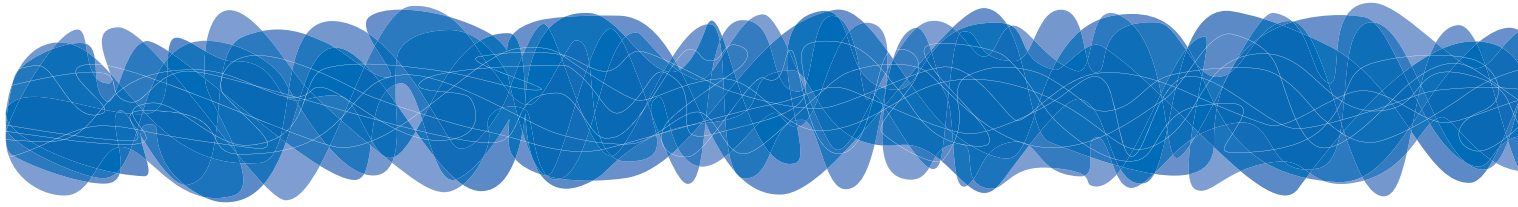
Most intensively discussed topics

How to fund what kind of research has been intensively and controversially discussed. Barbara Coudenhove-Kalergi called for a more competitive approach while Alexandra Strickner welcomed a funding focus on social-ecological transformation research because according to her, a lot of money is going into the wrong kind of research. A participant suggested we do not need more competition but rather more cooperation among researchers as a crucial element of social-ecological transformation.

There was consensus that our way of living, i.e. of producing and consuming goods, must change. However change is complex and, according to Christina Plank, its democratic dimensions need to be considered, i.e. different actors (politicians, entrepreneurs, industry, civil society) and their interests as well as barriers, must be considered. Alexandra Strickner noted that existing social-ecological inequalities must be addressed. She called for more social-ecological justice, saying, “We are all earth-dwellers with the same right to life”.

New ideas contributing to transformation

As emphasised by Christina Plank, research needs places, where new experiences can be made. It also needs independence and a framework that engages with society (in a transdisciplinary way) integrating different disciplines using different methods. Social-ecological transformation research involves social science, environmental science, climate science and natural science. Research should also be more inclusive, involving, civil society and using language that makes it more comprehensible for non-academic actors. Creating an inclusive research environment could include formulating research questions with different (local) stakeholders. In social-ecological transformation research, it should be addressed who is losing and who benefits from specific research and societal projects.



Summary

Beate Littig clarified that transition and transformation are two distinct approaches. Transition could be described as a modernisation strategy, following a predefined pathway, whereas transformation stands for a deep change of our current way of living. Elisabeth Freytag-Rigler emphasised that there is not a missing link between researchers and politicians. Yet, there is apparently a large gap between the current dominant economic system and social-ecological transformation research. Fred Luks therefore advised communicating with banking professionals. He saw integrating them as stakeholders as a hidden chance for social-ecological transformation research.

The closing discussion provided space for key findings from each speaker. Elisabeth Freytag-Rigler highlighted the importance of bringing politics and research closer together. Alexandra Strickner called for research funding to be redirected and civil society to be integrated in social-ecological transformation research. Barbara Coudenhove-Kalergi stated that technological and social innovations should be the focus of more research and also that more private money should be mobilized for research. Beate Littig suggested that being less afraid of critical research and using critique as a way to move society forward could provide benefits not only to politics but to society as a whole. Christina Plank called for civil society, industry and politics to be open to the discussion about social-ecological transformation (research).

Key message and the role of people in transformation processes

In terms of integrating people in transformation processes, Beate Littig emphasised the following: “We must be far more concrete and try to be less abstract. We should be talking about something we could really achieve.” She also said that we need to understand human behaviour and how it works. For her, changing practices is a key aspect for delivering social-ecological transformation (research).

Message

A social-ecological transformation means a profound change of societal structures.

Recommendation

We need appropriate research structures and specific funding for social-ecological research.



THE ROLE OF WOMEN IN TRANSFORMATION – SHARING EXPERIENCES WITH CHANGE PROCESSES

Session organisers

Federal Ministry for Sustainability and Tourism;
Austrian Society for Environment and Technology

Moderation

ASTRID REINPRECHT, Austrian Society for Environment and Technology

Speakers

CHRISTINE LINS, Co-Founder, Global Women's Network for Energy Transition (GWNENET)
MELANIE METTLER, CEO, Sunraising Bern, and Co-President, SIBA – Social Innovation Accelerator Bern
MARIANNE GUGLER, Co-Founder, Employment Cooperative Otelo eGen
FLORIAN STURM, Employment Cooperative Otelo eGen
EVELINA LUNDQVIST, Founder, The Good Tribe
ANNEKE ENGEL, Board Member, Austrian Small Farmers Association (ÖBV)

Short description

In public perception, decision makers are mainly men. But is it really mainly men who initiate change processes, drive them forward and lead them to success? Is there a difference between men and women in terms of approach, and willingness to change? Are there success factors or obstacles that are more likely to affect men or women? Do men and women have different roles in change processes? This was the subject of this interactive workshop, to which men and women were explicitly welcomed. Five role models (women and men) from different areas of expertise related to sustainability presented their personal stories of how they initiated and implemented change. Participants were invited to listen to these stories and explore common patterns and differences.

Most intensively discussed topics

The most important topics discussed related to gender in transformation processes. How much does gender really matter? Are values and capabilities often attributed to women really dependent on their gender? Or are these values and capabilities that signal the arrival of a “new age” of change processes? Some participants believed that gender did matter above all other factors, while others thought that the framing of the whole workshop led to this factor being singled out, whereas other factors might have mattered more (eg. power, social capital, privileges, etc.). Besides this, participants discussed obstacles and challenges for women (and changemakers in general) in transformation processes in detail.

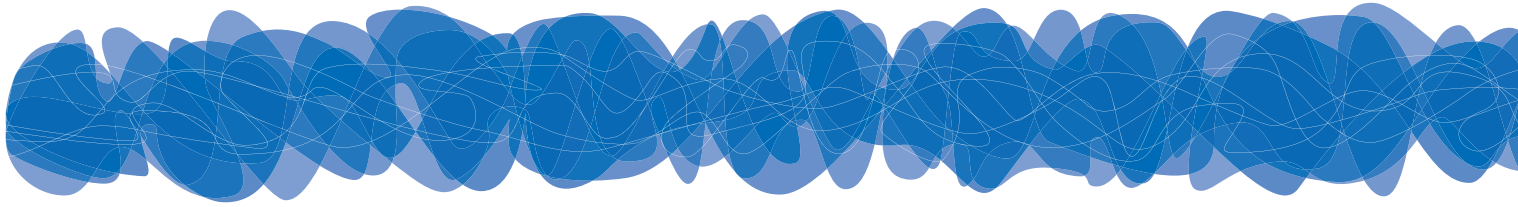
New ideas contributing to transformation

An interesting idea was that changemakers are not per se automatically immune to from repeating the “mistakes of the past” (e.g. promoting men over women, excluding minorities, discriminating, etc.). This explained why changemakers needed to be specifically aware of and sensible to diversity. The task for changemakers would be to build up initiatives for socio-ecological transformation that are inclusive in all dimensions (gender, age, ethnicity, etc.).

Another interesting insight was that new models for leadership are needed for socio-ecological transformation – models that are less hierarchical and more open and transparent for participation by the many rather than the few.

Summary

The key findings were that leadership in collective processes is key, and that passion is important – matching what you do with what you like. (Female) Changemakers need to: Act on serendipity; Be persistent through passion; Be open to be able to identify opportunities; Be inclusive, and not repeat



past mistakes when creating new systems; Be courageous and grasp opportunities; Be confident; Assess which fights are worth fighting.

Important strategies for changemakers are: Looking for like-minded groups/ communities; Staying and developing one's own way forward; Abandoning old ways to start something new; Building on solidarity & be solidary.

In male-dominated areas in particular, it is important to follow one's own passions, to realize dreams, find one's own way, found networks and find commonalities. And finally, there should be more people involved in transformation!

Key message and the role of people in transformation processes

Women play crucial roles in transformation processes. They are both initiators and fighters for change. They are less affected by transformation processes as such than by conditions and contextual factors that shape such processes and actors' room for manoeuvre within them.

Message

Changemakers: Don't repeat old mistakes while building up initiatives for socio-ecological transformation – be inclusive in all dimensions (gender, age, ethnicity, ...)

Recommendation

Promote new models for leadership in transformation!



RESPONSIBLE PRODUCTION AND CONSUMPTION: CO-OPERATION ALONG VALUE CHAINS IN CONFLICT AREAS

Session organisers

REWE International AG, GLOBAL 2000

Moderation

KLAUS KASTENHOFER, MD, Independent Consultant

Panel Guests

TANJA DIETRICH HÜBNER, Head of Sustainability, REWE International AG

LEONORE GEWESSELER, Political Director, GLOBAL 2000/Friends of the Earth Austria, Member of the European Executive Board of Friends of the Earth

Short description

About half of the allotted time was used to describe structure and activities of the co-operation of GLOBAL 2000/Friends of the Earth Austria and REWE International AG on the topic of pesticide reduction in fresh produce for the audience. The second half of this break out session dealt with co-operation along value chains in more general terms with a focus on conflicted issues.

Most intensively discussed topics

It was most intensively discussed how co-operation can work positively in the long run if the (perceived) influence of participants along a value chain differ. There was a consensus that for a successful co-operation a level playing field has to be constantly and actively created and different mission/vision/values kept in mind and respected by all participants.

New ideas contributing to transformation

Explore in more detail how a favourable setting for such co-operations can be created and indeed more co-operations initiated.

Summary

- Cooperation along value chains does work and can deliver extraordinary results if conflicted topics are involved as is the case with the use and residues of pesticides in the production of fresh fruits and vegetables
- Different background, mission/vision/values also result in differences regarding goals, means, culture and so on. Those differences have to be kept in mind and valued -> also in regard to the limits of a cooperation and the freedom to act independently (and even antagonistic) in areas outside the defined co-operation.
- Not everything can be solved via a cooperation along value chains with NGOs (eg. climate crisis which needs vast legislative framework to create a level playing field and ensure desired outcome). Some topics have to be resolved on a societal/legislative level. Still, also in such areas, co-operations can be beneficial because a proof of concept and its acceptance can be showcased.

Key message and the role of people in transformation processes

People are of utmost importance in regards of value chains. People as customer and supporter, both for retail and NGOs, are ultimate influencers. That has always to be kept in mind and integrated in the co-operation.

Message

Cross-Sector co-operation is important to get the 360° insights essential to solve difficult problems along value chains.

Recommendation

Co-operation should be pursued more actively from “alliances of the willing” for sustainable transformation – respectful of different mission, vision, values of partaking stakeholder.



GOOD DEAL? PRECONDITIONS FOR SUSTAINABLE FINANCE

Session organisers

Ecosocial Forum Austria (ÖSFA);
Federal Ministry for Sustainability and Tourism (BMNT)

Moderation

GEORG GÜNSBERG, Policy and Strategy Advisor

Speakers

MARTIN SPOLC, DG FISMA, Deputy Director General Financial Markets, Head of unit Capital Markets Union
ARMAND COLARD, ESG Plus GmbH & wasmachtmeinfonds.at
MARTIN BRUCKNER, Chief Investment Officer, Spokesperson of the Board of Allianz Investmentbank AG and Board Member of Allianz Pensionskasse AG, Allianz Austria
KATHARINA MUNER-SAMMER, ÖGUT – Austrian Society for Environment and Technology

Short description

We are facing enormous societal challenges. In the context of human-induced climate change, often considered to be the greatest challenge of this century, climate mitigation and adaptation concern all of us and are typical cross-cutting issues - as is finance. Finance is highly relevant across all economic spheres of action. It is thus of utmost importance to advancing any form of ecological transformation. Every measure taken to address climate change requires financing by some means. And all of us participate in this financial complex, whether “just” by having an insurance policy or investing in stocks and shares. Financial markets and their inherent logics contribute to the problem of unsustainability, continuing to fuel highly unsustainable projects and dynamics. However, finance must also be part of the solution, too.

Most intensively discussed topics

A variety of people representing different levels at which the issue can be addressed were invited to take part in the workshop. A representative of the European Commission from the Directorate-General for Financial Stability, Financial Services and Capital Markets Union discussed the EU’s Sustainable Finance Action Plan, an international corporation addressed the topic of divestment from coal, a founder of an organization aiming to increase transparency within the national funds landscape, and a representative of an investment platform financing sustainable energy projects all took part. Discussions reflected the different levels and perspectives of the panellists. Consensus was found mainly on the urgent need for action, as well as the enormous volume of investment required to promote sustainability.

New ideas contributing to transformation

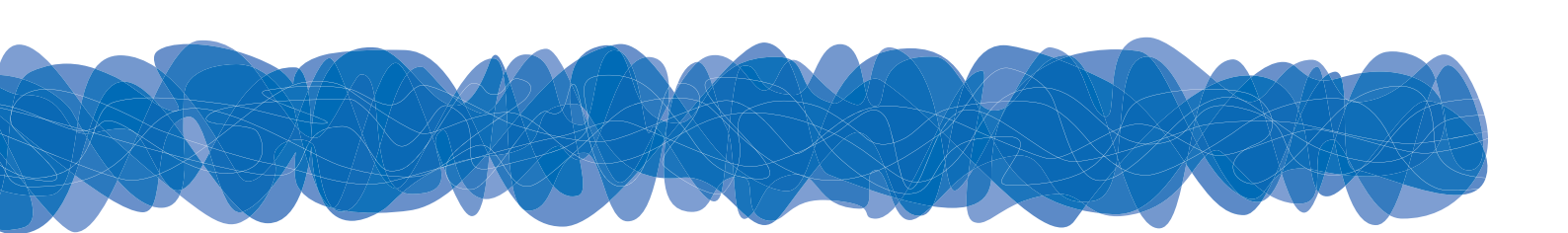
In terms of return, sustainable finance products are no less competitive than conventional financial products (involving fossil fuel economy, weapons production or production practices including child labour or lax environmental regulation). The enduring myth of the need to choose between “good conscience” and “good yield” can ultimately be disproved.

Well informed consumers can make a difference to the whole finance industry, when comparing investments according to their merits and ethical goals. Reliable information must be disclosed as a principle of a well-functioning market. It is the aim of the proposed EU legislation, to compel the industry to disclose information and to make this information easily comparable, which some firms do already.

Summary

After an introduction by the session’s hosts and moderator, all panellists spoke, followed by a lively discussion.

Martin Spolc presented the EU Action Plan for Sustainable Finance. New, efficient ways to combine private and public funding are key to achieving ambitious environment goals. The financial sector



must be part of the solution, which will lead to the ultimate goal, sustainable economy and businesses.

Martin Bruckner presented Allianz' cooperation with WWF and their asset management strategy. Allianz took the initiative rather than waiting for EU proposals. Allianz divested completely from coal (coal emission in portfolio reduced to 0%). Targets were made public, ensuring that pressure focused on keeping promises and delivering results. Alliance Group Munich adopted the Austrian approach in 2017 globally. Allianz also began to invest in infrastructure to achieve SGDs.

Armand Colard presented the transparency platform "wasmachtmeinfonds.at" (What's my fund up to?), aimed at private investors. An accessible web-tool enables checks on the 100 biggest consumer funds on the market in Austria showing investments in coal, oil & gas, nuclear energy and weapons. Funds can be selected according to personal exclusion criteria, allowing private consumers without deep knowledge to easily exclude unsustainable funds from their portfolio or investment decisions.

Katharina Muner-Sammer: noted financial service providers need to increase transparency by integrating ESG-criteria in customer services, disclosing this information and sustainability risks to all investments. Moreover, carbon impact benchmarks are needed. She mentioned SEFIPA - Sustainable Energy Financing Platform in Austria - the H2020 Project, platform to promote sustainable investment e.g. Crowd4energy. The Sustainable Investment Training Course by ÖGUT enables European financial advisers to provide investment advice that includes environmental, social and ethical standards (part of the Lifelong Learning Programme).

- Finance always requires a market design (taxonomy, disclosure, benchmarks).
- Awareness raising – consumers are aware of local food etc. but are they aware where their money goes? Especially money which is not spent physically. It should become normal to also "check before you buy" for (sustainable) investments.
- The financial sector alone cannot solve climate change – everyone is needed.
- An enormous amount of money is needed to invest in sustainability, not only public money. Lock-ins into "wrong" infrastructure must be avoided.
- The financial sector lags far behind, need to do more, much faster. Short-term thinking in financial markets' needs to end and develop into a (political) "long-termism".

Key message and the role of people in transformation processes

Since all citizens are participating in global financial constructs, citizens play an important role in transformation. However, as this workshop has shown, to enable the mainstreaming of sustainable finance, some crucial criteria (such as transparency through a common taxonomy, the need to disclose appropriate information and accepted standards) must be met to facilitate investment decisions. Greater financial literacy in the general public is urgently needed.

Message

Current investment policies not in line with a path to low carbon economy and climate resilience. Integration of sustainability in all ongoing investment decisions. Systematic change of investment culture with long-term perspectives in decision making before short-term profit thinking.

Recommendation

EU must show leadership on sustainable finance as key element for sustainability on a global level! In the spirit of the EU Action Plan on Sustainable Finance provide powerful targets, instruments and tools to re-direct capital flows and provide transparency for all investors.



THURSDAY, 15 NOVEMBER 2018

Corinna Milborn and Peter Woodward welcomed the participants, summarising the packed agenda and the call to action evolving into a more powerful text. They described the conference portal, parallel sessions, different models, and the discussion where growth should go to the heart of the issue. They also introduced the three speakers.



KEYNOTES PERSPECTIVES AND PATHWAYS AHEAD

CHRISTOPH BADELDT

**Director of the Austrian Institute of Economic Research and
Professor at the Institute for Social Policy Vienna University of Economics and Business**

Christoph Badelt points out three ideas for discussion: (1) aspects that require no discussion, (2) often overlooked topics, and (3) topics to concentrate on in future.

Christoph Badelt noted the concept of welfare goes beyond strict measurements of a country's Gross Domestic Production (GDP). Societal problems have economic, ecological and social dimensions, which need equal weight in political discussion.

Second, Badelt outlined that economic systems are judged by their degree of competitiveness. He highlighted that competitiveness should be regarded as the capability of a socioeconomic system to generally improve quality of life and has to be compatible with key social and ecological goals of a society. It was possible to have high net social spending and still be competitive, based on World Economic Forum data. Also looking at the key ecological indicator of CO₂ emissions, it is possible in principle to have low carbon emissions and still be competitive. He concluded that compromises were worthwhile.

Christoph Badelt stressed that it was important to discuss concrete pathways from the status quo to a desirable future, focusing on how society can get there. The focus should be on how to link reality and ideas for an ideal world, taking into account political circumstances as well as broad catalogues of goals like the SDGs.

The Austrian Institute of Economic Research (WIFO) approaches three strategic goals: economic dynamics, social inclusiveness and environmental sustainability, emphasising the concept of inclusive growth. Christoph Badelt outlined that the single market has led to more growth, but that it is important to look at who benefits of this growth.

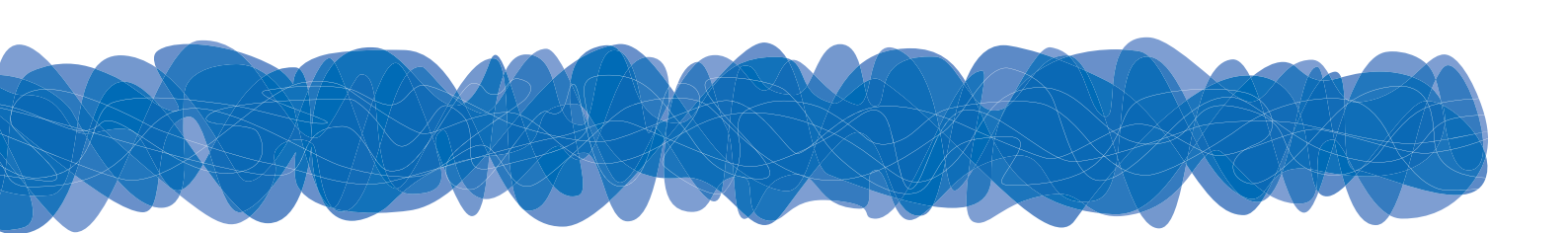
The Bertelsmann Foundation has provided an overall index of GDP per capita and poverty/ social exclusion, yet the picture remains unclear. Badelt therefore emphasised that specific target groups e.g. marginalised groups need to be identified by social and public policy. Although the concept of inclusive growth has been debated in Europe, the issue of international distribution of growth between the rich and the poor has not been solved. Debate must be expanded to the global level.

Badelt concluded that debate should focus on a pathway from the status quo to a more equal distribution of growth including among less developed countries. A new form of growth, taking into account ecological and social dimensions was needed

KATE RAWORTH

**Senior Visiting Research Associate at Oxford University's Environmental Change
Institute; Senior Associate at the Cambridge Institute for Sustainability Leadership**
From growing to thriving

Kate Raworth started by explaining that the shape of progress in the 20th century was always presented as a GDP/ time graph, whereby the GDP grows over time. The idea that progress means growth has become deeply rooted in people's minds. She emphasised that a different concept of progress is



needed for the 21st century and proposed the doughnut economy model to serve as a compass for human prosperity. The challenge is to meet everyone's needs while not exceeding the life supporting systems of planetary boundaries that underpin human wellbeing. Viewing the world today, planetary boundaries have already been overshoot. New theories, business models and policies are needed to tackle the challenge of our time.

Kate Raworth stressed that a country should meet the needs of its entire people and stay within the limits of planetary boundaries, although so far no country is even close to doing so. Because every developed country is exceeding these limits, she proposed to define all countries as "developing countries". She noted that no country has ever ended human deprivation without a growing economy, yet that no country with a developed economy has ever ended environmental degradation. Theoretically, it would be wonderful and easy to achieve green growth but what is needed is absolute decoupling. Some countries have achieved decreasing resource use in absolute terms whilst having a growing GDP but, according to Raworth, it is essential to also consider the rate and sufficiency of absolute decoupling. According to Raworth so far, no country is on track to return within the limits of planetary boundaries.

Kate Raworth outlined that policies will always favour GDP growth because societies are economically and socially structured to grow. She called for the status quo of the structures we created to be challenged, because they are JUST a design. According to Raworth the important and inconvenient question for today's politics is how to overcome the challenge of international competitiveness of growing societies and undo the structures of economic and social growth addiction?

Looking at nature's growth curve, growth is natural but not infinite. We have economies that need to grow, whether or not they make us thrive. It is essential to develop economies that enable societies to thrive whether or not they grow. To move away from growth dependency and to meet all people's needs, different values and policies are needed. Kate Raworth concluded that deeper essential values of life, such as the sense of community, creativity and participation, should grow rather than the economy.

TIM JACKSON

Professor of Sustainable Development at the University of Surrey

Director of the Centre for the Understanding of Sustainable Prosperity (CUSP)

Perspectives and pathways ahead

Tim Jackson congratulated the Growth in Transition Initiative on its 10th birthday, appreciating that what the initiative has achieved is also because the Ministry supports critical thinking on growth.

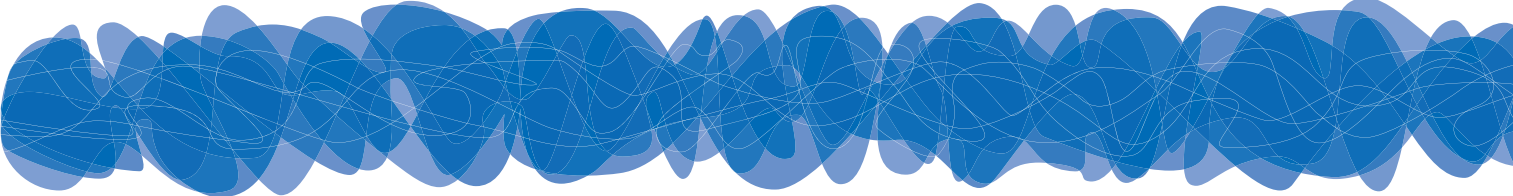
Jackson noted that Ludwig Boltzmann suggested the most likely state of the world is chaos. He cited Hermann Daly, noting there must be an economy and a set of capital, which is maintainable within the finite limits of the planet. In national economies it is important to account for things having a life cycle and eventually running down. This is a concept that links the material world with economic progress.

Daly also showed that a certain point of growing, growth in fact appears uneconomic. GDP should therefore be seen as a means not an end. It is crucial to focus upon transformation and accept that humans are aspirational creatures. It is not just about framing an ideal world, through the relentless pursuit of eternal growth, or the escalation of growth debate, but is instead a visionary concept because humans have aspirations. This is because humans have finite lives, and our aspirations are what keep us going.

At the Faculty of Philosophy at the University of Vienna, Boltzmann provided philosophical thoughts "towards probabilistic reasoning of the entropy law and of love". The link between philosophy and physics is important. Tim Jackson added that the human ability to create order out of chaos depends crucially on how we use high quality resources and what we turn them into.

It is tempting for politicians to respond to human aspirations by giving promises of infinite growth. However, Jackson emphasised that a better life while living with less is possible. He proposed an idea of sustainable prosperity, meeting aspirations and living well with less.

Tim Jackson mentioned the concept of "flow" and outlined that there is a positive relationship between the state of flow and wellbeing and a negative correlation with materialism. Activities that give people flow are mostly light in material terms, producing more fun with less stuff. Fun activities can



be light in material resources and environmental impact, which means greater wellbeing with less environmental impact. Jackson question what hinders this way of life.

Discussion

Keynote speeches were followed by a panel discussion. Christoph Badelt suggested it was necessary to talk about ideals while debating who has the right for defining the minimum stages and maximum ceilings of the doughnut in Raworth's model. He suggested there was a key political and distributional question of who has the right to define these limits. Christoph Badelt suggested the focus should be the role of politicians and very concrete measures rather than ideals.

Kate Raworth acknowledged that defining planetary boundaries is an ongoing debate and the doughnut economy model is still incomplete. However, there are ideals behind every political decision and people become used to status quo perceptions. Raworth emphasised that a new generation bringing with it a profound paradigm change is needed.

Tim Jackson noted that closing the gap between the ideal world and the reality of growth dependency is hard work. If you do not question ideals, you end up embedded in a system heading in the wrong direction. He mentioned Cuba as an example of where politics had been able to overcome resource shortage by putting people first, for a short period of time. Human wellbeing is in danger of being put aside in a system where competitiveness is needed. He argued that spending quality time is chased out of today's economic systems and highlighted that activities such as care, craft, creativity, and culture are essential sectors fostering societal wellbeing yet that those sectors are not productive in an economic sense.

Christoph Badelt stressed that the growth concept is embedded in politics and in Austria they are discussing including it in the constitution. However, he thinks that politicians are realising that growth is simply a concept and that there are other things people really need: a society cannot live without organising basic services such as care.

Kate Raworth agrees that politicians want something more than growth because they tend to place many adjectives in front of the term, which can be seen a sign that the concept of growth needs to change. She offered the doughnut concept as the start of a new paradigm.

Tim Jackson comments that today's economic models are lagging behind in meeting people's needs, stressing that many people feel left behind and that a particular set of ideals and institutions are not pointing in the right direction. Tim Jackson concluded that the transformation has to go beyond ideals and translated into practical measures. Institutions must be established that are reflective enough to hold on to things that matter at this critical stage.

Christoph Badelt outlined that it is necessary to state and show the urgency for social and economic problems but it is counterproductive to define extreme goals. He called for a small steps approach in practice while keeping a big vision in mind. He agreed that growth has left groups of society behind, and has been the opposite of inclusive growth. Growth is a means not an end and strongly related to power. He argued that problems are not solved by forbidding growth.

Kate Raworth commented that she was not against growth per se. She emphasised that in order to move forwards it was crucial to make clear what someone is standing FOR. Regarding the urgency of the pressing problem of climate change, it was crucial not to freeze but to keep on fighting for a paradigm change and a far more inspiring future that includes a different kind of prosperity.



SPECIAL SESSION: WHERE PEOPLE MATTER

Session organisers

Austrian Federal Ministry for Sustainability and Tourism;
Vienna University of Economics and Business; Competence Center for Sustainability

Moderation

FRED LUKS, Head of the Competence Center for Sustainability, Vienna University of Economics and Business

Speaker / Panel guest

MICHAELA MOSER, Lecturer, Department of Social Sciences, University of Applied Sciences St. Pölten
WILLIBALD CERNKO, Chief Risk Officer, ERSTE Group Bank AG

Short description

With two speakers from different fields of expertise, this session covered a wide range of issues in the context of human needs and constraints. The speakers explored drivers of change and transformation such as innovation, design and risk in the social and ecological field alike. Speakers began by introducing themselves and briefly summarising their background and interests. The audience members contributed questions to enrich the subsequent discussion.

Most intensively discussed topics

Marginalisation and distribution issues were discussed as important and urgent social challenges. Sustainable development means meeting needs at different dimensions, at which humans should be included. Although biodiversity and environmental aspects were the focus in many discussions, the social dimension is also key. Extreme poverty also exists in “developed” Europe.

There was consensus about the relevance of education. Education was seen as a key overcoming the long-term problem of poverty and empowering people around the world. Ultimately, it is what people are able to do not what they own that matters. Mr. Cernko spoke about a free service supporting first steps to regaining financial independence and the importance of bank account access. Ultimately, it is the individual – the human being – that matters.

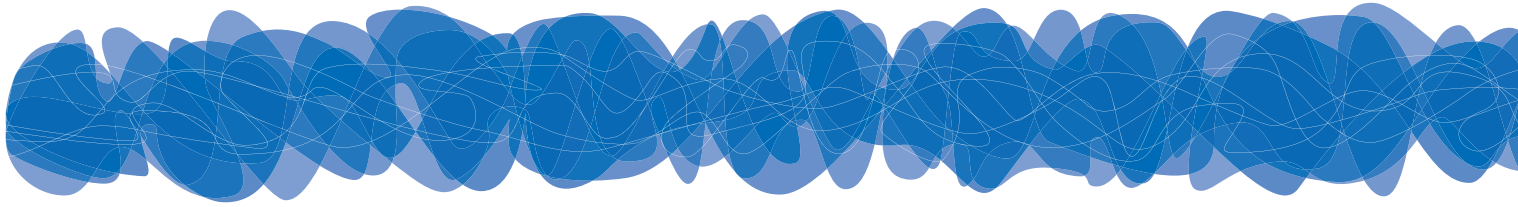
New ideas contributing to transformation

Populism in societies was seen as a threat. Yet although we should be aware of this problem we should not resort to simplifications. Societies do not need to reduce the complexity of problems but rather to stand together and to communicate them.

Summary

Ms. Moser questioned the title of this session, suggesting that it was not only about where people matter, but which people matter. She felt the title pretended humans are always the same, but that was not the case since needs are not the same for everybody in every situation. The SDGs go hand in hand with other humans needs, like self-realisation and social relationships. A framework is required that provides a flourishing environment for people to be creative and fulfilled. She emphasized the need for radical change, to step out of the mainstreaming society, which reinforces fears against several groups.

Mr. Cernko explained the role and the aspects of ERSTE Group bank. Its founders believed that they could secure access to prosperity for everybody, which is still reflected today. It is not only about stakeholders and shareholders, it is about where people matter. There are still critical points, such as which investments should be supported and which not. What should



happen to investments that are not aligned with the SDGs, but generate more security? Overall, the ERSTE Group bank has created specific commitments to the seven SDGs.

Key message and the role of people in transformation processes

Message

The key finding is about living up to the SDGs with real measures and moving from talking to action. “Deeds – not words.”



FISCAL REFORM FOR A LOW CARBON TRANSITION

Session organiser

Austrian Institute of Economic Research

Moderation

MARGIT SCHRATZENSTALLER-ALTZINGER, Deputy Director, Austrian Institute of Economic Research

Speakers

MIKAEL SKOU ANDERSEN, Professor, Aarhus University

KURT VAN DENDER, Head of the Tax and Environment Unit, Organisation of Economic Co-operation and Development

ANGELA KÖPPL, Senior Researcher, Austrian Institute of Economic Research

CLAUDIA KETTNER-MARX, Researcher, Austrian Institute of Economic Research

Short description

Environmental economics advocates for decades for market-based approaches to reduce negative environmental externalities. Climate change has given new impetus to use price-based instruments to curb CO₂ emissions. This session shed light on experience from countries with carbon taxation regarding barriers and success factors and presented ex-post evaluation of the environmental, economic and social effects of a socio-ecological tax reform. First thoughts on whether long-termism of climate change would call for alternative taxation concepts (focusing on stocks) were discussed.

New ideas contributing to transformation

- The need to focus more on implementation obstacles and success factors for the implementation of fiscal reform
- The need to shift the attention from taxing only or primarily flows (e.g. CO₂ emissions) to taxing stocks

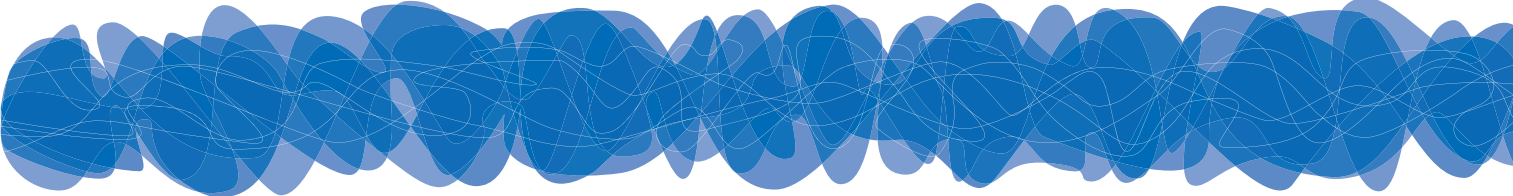
Summary

Margit Schratzenstaller opened the session that had two parts; four presentations and an interactive part.

Mikael Skou Andersen presented the institutional framework for a new tax policy. Austria has a modest level of environment taxes and less than 2% of GDP, with almost no pollution taxes. In contrast, Denmark has many pollution related taxes, while Austria has energy taxes, transport taxes, pollution taxes. A new EU study on revenues shows potential taxes Austria could have, including a carbon tax. Austria's cars emit more CO₂ than the EU in average, leading to tax advantages for car companies in Austria. Next to a packaging tax, Denmark has a pesticide tax and a waste tax. The study shows that the economies of EU member countries would not be harmed substantially by future carbon taxes, designed to kickstart a social-ecological tax reform. Responding to the question of 'Are Eco-taxes a good idea?' 75% of Austrians agreed, 55% even if such a tax reform would not stimulate economic growth.

Kurt Van Dender outlined how taxes work as environmental policy instruments, from environmental fiscal reforms to tax policies designed to lower carbon-emission growth. Van Dender stressed that taxes are an effective environmental policy instrument in Australia. They are designed to be cost effective and to reduce emissions. Still, the taxes are not used to their full potential, progress is "slow and a piecemeal". The carbon pricing gap declined since 2012, with a 1% drop each year. Revenues changed over the same time in G7 countries, and these countries are not making more use of environmental taxes than the competing countries. There is little evidence that long time competitiveness is combined with a good revenue use. He stated that a "solution aversion" should be avoided, and revenue use decisions are key for unlocking future potentials.

Angela Köppl's presentation on environmental taxes and reforms showed that it is time to shift views on environmental taxes, especially upcoming ecological tax reforms. There are diverse questions on a multidimensional policy context and current trends, short vs. long-term policy essentials,



and the consensus for the pricing of greenhouse gases. Four main economic issues were presented with regard to impact and revenue recycling. The distributional aspects and competitiveness are in need of a transformation. It was highlighted that Political Science can be used to stimulate transformations and practice in environmental taxation. This infrastructure determines energy and emission flows during the operating phase, but buildings and mobility require more radical transformations than that, and a profoundly different structure. It was shown that innovation needs to be disruptive. Claudia Kettner-Marx compared CO₂ taxes in different EU member states, with Sweden having the highest, and Poland applying the lowest tax rates. Implicit CO₂ tax rates range from 141€ to 301€ per metric ton of CO₂. The WIFO.DYNK model is designed to look at changes of short-term effects. The following scenarios were presented: CATs scenarios tax rates and recycling of taxes for Non-ETS sector; CO₂ tax rate scenarios (low, med, high), energy related CO₂ emission changes in Non-ETS sectors (low, medium, high), final energy consumption changes in Non-ETS sectors (low, med, high), CO₂ taxes burden on households relative income, with the CO₂ tax having a relative effect on the GDP. In summary and conclusion, an action on national level is needed, so the current CO₂ emissions yield a significant and structural change of the tax system and its long-term strategy. A transparent and evidence-based discussion is needed to reach a consensus.

Key message and the role of people in transformation processes

People play a key role as they are carrying the burden from environmental taxes. Therefore one of the most important issues from the perspective of people is how tax revenues are recycled, and whether and how the tax burden imposed by environmental taxes is alleviated by compensation measures.

Message

Climate change is one of the most pressing environmental issues society faces.

Recommendation

Energy and carbon taxes can contribute to achieving the transition towards a low carbon society but have to be integrated in a comprehensive mix of policy instruments. A careful design of fiscal reform is important to achieve broad social acceptance.



A POSITIVE POST-GROWTH SCENARIO FOR EUROPE – THE X WAYS TO MAKE A POST-GROWTH SOCIETY WORK

Session organiser

EU Environmental Bureau and European Environmental Bureau (EEB)

Moderation

Peter Woodward, Conference Facilitator

Panel guests

KATE RAWORTH, Senior Visiting Research Associate, Oxford University's Environmental Change Institute, Senior Associate, Cambridge Institute for Sustainability Leadership

PATRICK TEN BRINK, EU Policy Director, European Environmental Bureau (EEB)

TONI RIBAS BRAVO, Ecology Group Coordinator, Barcelona en Comú

HALLIKI KREININ, PhD Student and Research Assistant, Institute for Ecological Economics, Vienna University of Economics and Business

BARBARA KREISSLER, Director of Professional Lighting, Public & Government Affairs, Signify

Short description

Introduced as “the most significant session in Vienna, in Europe, in the world” – Peter Woodward welcomed everyone to the session. Patrick ten Brink introduced the needs for post-growth and presented the 5 Vienna Vehicles as potential leverage points to make progress on the transition to a post-growth economy: 1) From PRODUCTS to SERVICES, 2) From an ANTI-TAX NARRATIVE to a GREEN and FAIR TAX, 3) From GDP to WELLBEING GROWTH, 4) From TTIP and CETA to CARBON TARIFFS, and 5) From CONSUMER IS KING to SUFFICIENCY FOR ALL. After an initial assessment by the panelists regarding the value of these, participants voted for the two Vehicles to be pursued as a priority, after which Vehicles 3, 2 and 5 were discussed in detail. Participants were also invited to give feedback on the Vehicles via the forms provided during the session.

Most intensively discussed topics

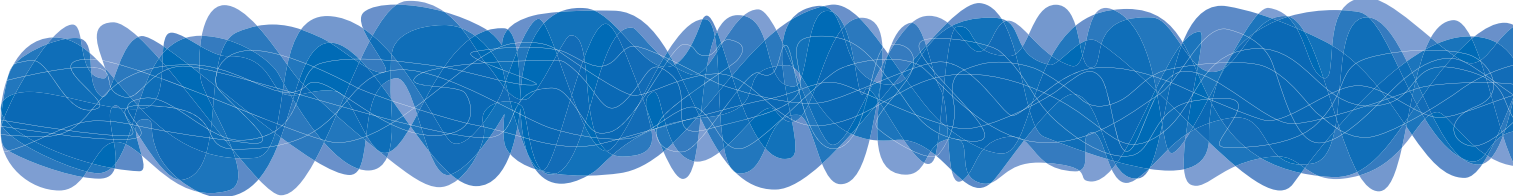
Discussion centred on the five Vienna Vehicles, and in particular, Vehicles 3, 2 and 5. A consensus was achieved about the urgency of tackling the environmental crisis, the need for partnerships between business, the UN, cities, academics and unions, and regarding the shortcomings of GDP as an indicator. None of the panelists rejected the proposed Vehicles outright. The majority of panelists and audience members saw Vehicle 3, including the demand for turning the Stability and Growth Pact into a Stability and Wellbeing Pact, as having the greatest benefit for a transformation of the system. Kate Raworth pointed out that this Vehicle would change the paradigm. There were somewhat divergent opinions regarding the role of large companies and technology in this process of transformation.

New ideas contributing to transformation

Our panelists raised a range of interesting ideas that could contribute to a transformation. The most important ones were: business models, such as circular lighting by Signify; working time reduction to increase creativity; the need to change the goals of the system from endless growth to thriving and the need to create networks around this theme (e.g. an alternative club to the G20); the need to question power and ownership; connecting the Vehicles through partnerships; the powerful role for cities and their people in changing the system; harmonizing taxes across Europe; restricting trading around the world to data only – data can go global, but materials should stay local.

Summary

Kate Raworth pointed out that **Vehicle 1** (shift from products to services) and Vehicle 4 (limited, balanced and fair trade) belong together because production and trade go hand in hand. She argued for local production, while restricting trading around the world to data only. Data can go global, materials



should stay local. Vehicle 1 was somewhat contested. While Barbara Kreissler highlighted the potential of her company to reduce carbon emissions with energy efficient LED light bulbs or circular lighting, Halliki Kreinin and Toni Ribas countered by questioning power and ownership of big businesses and the supposed past success of technologies in solving environmental problems.

The majority of panelists and audience members felt **Vehicle 3**, including the demand for “turning the Stability and Growth Pact into a Stability and Wellbeing Pact”, promised the greatest benefit for a transformation of the system. Kate Raworth pointed out that this Vehicle would change the paradigm and called for the goal to change from endless growth to thriving (thriving pact).

With regard to Vehicle 2 (a green and fair tax), there was overall agreement about the influence taxes can have on consumption. The challenge was to get it right and to think it through further: Where does the taxation come from? What are the taxes spent on? [Kate] Patrick ten Brink stressed fair taxation was needed to ensure no one loses e.g. when introducing a flight tax.

Regarding Vehicle 5 (more sufficiency policies), it was stressed that the consumer is not sovereign in the market. New systems would therefore be needed (Halliki, Toni). Kate Raworth suggested using a different expression to “sufficiency”. Halliki Kreinin raised the issue of working time reduction as a means to reduce consumption and increase creativity.

To conclude, the session was a great success and was filled to capacity, which illustrates the intense interest in the question of how the EU can move towards a post-growth economy.

Key message and the role of people in transformation processes

People’s support is needed to steer policy in the right direction. While there is already broad support for these proposals (see the petition on post-growth: <https://you.wemove.eu/campaigns/europe-it-s-time-to-end-the-growth-dependency>), others still need to develop a deeper understanding of why such transformational policies are required. A successful implementation would affect people’s lifestyles, although but not in a negative sense. The proposals call for people and the environment to be placed at the centre of economic policymaking, which would ensure both society and the environment would benefit as a result.

Message

There is an urgent need for a positive and just pathway to a post-growth one-planet economy.

Recommendation

Dethrone the GDP King and install a **Wellbeing Queen**: Have DGWellbeing and Ministers of Economic Transition.



TO LIVE BETTER WITH LESS

Session organisers

Environment Agency Austria, Vienna University of Economics and Business

Moderation

INES OMANN, Senior Researcher, Institute for Ecological Economics, Vienna University of Economics and Business

Speakers

RUZICA LUKETINA, Member of the Community of Interest of Austrian Foodcoops

KIM AIGNER, Assistance to the Management, SOL – People for Solidarity, Ecology and Lifestyle

JOHANNES FREUDENTHALER, Founder of Carsharing 24/7

PATRIZIA ILDA VALENTINI, Assistant Manager Communication, Renault Austria GmbH

Short description

An interactive workshop on the topic of sufficiency was organized by the Environment Agency Austria and the WU Vienna University of Economics and Business, highlighting the concept of and need for sufficiency. This concept was demonstrated using two examples from the areas of mobility and food. Two speakers per topic gave insights into their respective approaches and experiences. Based on these inputs, two questions were discussed further in a total of 5 small, moderated discussion groups with each group tackling either the case of food or mobility. Each group was asked to (i) provide concrete examples of sufficiency practices in the respective consumption area and (ii) elaborate on what is needed for these sufficiency practices to become mainstream. Results of all groups were summarized and briefly reported back to the plenum.

Most intensively discussed topics

The concept of sufficiency and ways to “live better with less” were discussed in the context of mobility and food. There was a strong agreement among all participants that sufficient lifestyles, i.e. less material, resource, and energy consumption, are crucial to achieve sustainable consumption patterns and live within planetary boundaries. Moreover, there was a consensus that this transition towards lifestyles of sufficiency demand decisive actions from political actors, businesses as well as individuals.

All discussion groups reported a broad range of specific examples of sufficiency practices in the areas of food and mobility. This clearly indicated that there was no lack of good examples for the concept. With regards to what is needed for sufficiency to become mainstream, results were also rich, albeit less concrete. Participants agreed that transparency (e.g. of product costs and price), a better image of sufficiency, and trust were crucial. Moreover, framework conditions such as infrastructure, lifelong learning, legal frameworks, transparency, institutions, and incentives for innovation are needed to support lifestyles of reduced material and energy consumption and higher wellbeing. A transformation towards a good life for all, where people really matter, needs also to address the individual level.

New ideas contributing to transformation

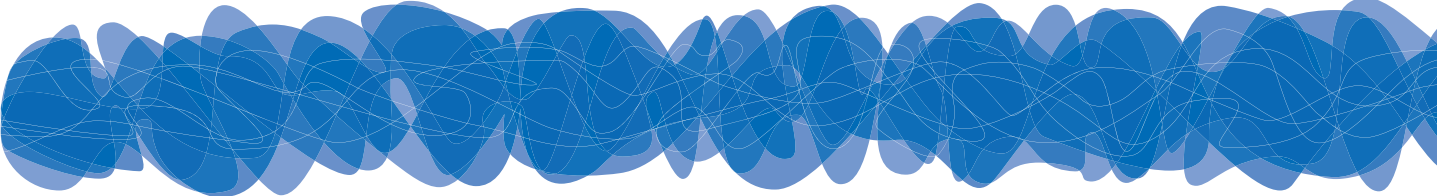
What are examples of sufficiency?

Mobility: Re-use, re-pair with up-grade | Home office, online conference and meetings | Virtual mobility | Hitchhiking, ride sharing | Mobility sharing | Autonomous e-mobility (car sharing) | Public transport | The examples are sufficient because they save energy, save resources, improve quality and save time

Food: Food Cooperatives (FC): cooking classes, communication, time needed | FC: less food waste, less packages, higher quality | Cooperation in production and consuming | Community supported agriculture | Vegan/ vegetarian lifestyle | Food sharing donations

What is needed to leave the niche?

Make sufficiency “sexy” | Give it a positive definition, instead of “Living with Less” | Regulations for public entities (public procurement, mobility) | Supporting infrastructures | Education and Lifelong Learning



Food: Emotional awareness | A concept between food coops and a supermarket are needed to make it easier for people: e.g. a farmer supermarket | Service-based food coops (storage rooms, etc.) | Increase marketing: fairteiler, best before date

Education: from knowledge to action/experience

Mobility: Trust | Show that quality of life is higher using sustainable transportations (eg. train vs car) | Reduce barriers for public transportation | Intermodal mobility | Good price for sustainable mobility | Transparency (price, production methods)

Summary

Ilse Schindler highlighted that sufficiency is particularly necessary, because with “business as usual”, the SDGs and EU targets on greenhouse gas emissions are not being met. In order for Austria to get on the right track, a less resource-intensive industry and a total change in mobility are needed. The Paris agreement can only be reached through a total reduction of energy consumption in combination with phasing out fossil fuels and taking more energy from renewable sources, and a change of social practices, lifestyles and governance.

Mirijam Mock added to Ilse Schindler saying that it is very clear that eco-sufficiency is needed, i.e. to reduce resources – importantly in absolute and not in relative terms – while ideally at the same time increasing wellbeing. She explained that the key to sufficiency is to reduce and substitute consumption practices and not add new ones, even if they are resource-light. She pointed out that there is great potential to reduce resources by sharing things such as cars, but mentioned potential backlashes, insofar as people who have previously relied on public transport, might start using carsharing and hence increase their ecological footprint.

According to Kim Aigner, the core question of sufficiency is what constitutes a good life. She addressed the issue of food, which she defined as living with better, not less quality food.

Ruzica Luketina explained the concept of Food Coops: as a food distribution outlet organized as a cooperative with direct contact to farmers and no middle-men in between. She advised consuming less on a collective level and buying only what you need rather than what you can buy.

Johannes Freudenthaler explained the benefits of car sharing, e.g. social advantages like less space being used for parking lots and many individual advantages like multi-mobile possibilities (with bicycle, public transport and a car), less costs and less organizational effort.

Patrizia Ilda Valentini presented Renault’s approach and expressed conviction that a better life with less is possible for the automotive industry. Renault is currently working hard to make electric vehicles and their batteries more efficient and the company is working on a transition from a mobility of owning to a mobility and energy service.

The participants discussed the following questions in the group sessions:

- What are examples of sufficiency in the field of mobility / food and do they really support living with less resources?
- What is needed so that sufficient lifestyles leave the niche and become mainstream?

Key message and the role of people in transformation processes

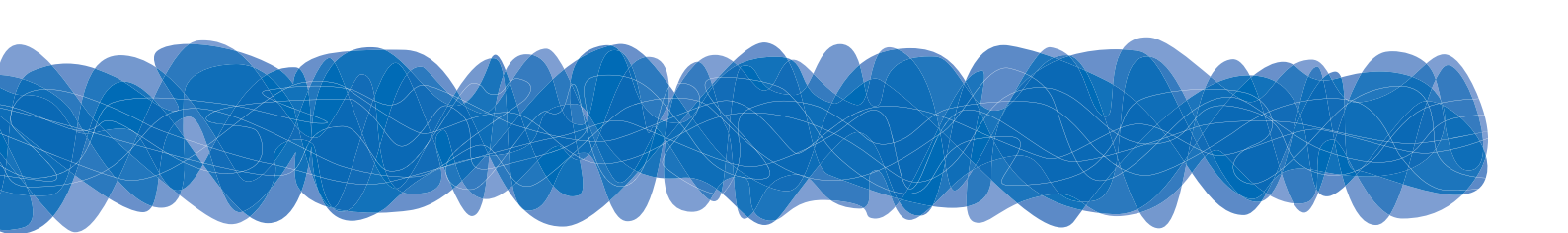
A transformation towards a good life for all, where people really matter, also needs to address the individual level. People are affected through conditions that support lifestyles of reduced material and energy consumption and higher wellbeing. These conditions are among others: infrastructure, lifelong learning, legal frameworks, transparency, institutions, and incentives for innovation, etc.

Message

A transformation towards a good life for all, where people really matter, needs also to address the individual level.

Recommendation

We call to create conditions (infrastructure, lifelong learning, legal frameworks, transparency, institutions, incentives for innovation etc.) that support lifestyles of reduced material and energy consumption and production.



**WWF CLIMATE GROUP BREAKOUT SESSION:
A1 TELEKOM AUSTRIA GROUP, ALLIANZ AUSTRIA, GUGLER*,
VBV-VORSORGEKASSE AND WWF EXCHANGE IDEAS ON
“COMPANIES TAKING ACTION TO MEET SDG 13”**

Session organiser

World Wide Fund For Nature Austria

Moderation

GILLIAN MARTIN MEHERS, Capacity Development Practitioner, Bright Green Learning

Speaker

LUKAS MEYER, Professor for Philosophy, Section for Moral and Political Philosophy, University of Graz

Panel Guests

ALEXANDER FARFAN, Global Lead on Science Based Targets, WWF

VERENA ANGER, Sustainability Manager, Gugler GmbH

MARTIN BRUCKNER, Chief Investment Officer, Spokesperson of the Board of Allianz Investmentbank AG and Board Member of Allianz Pensionskasse AG, Allianz Austria

Informal reflection

IRENE JAKOBI, Head of Corporate Sustainability, A1 Telekom Austria Group

PETER EITZENBERGER, Head of Corporate Sustainability, VBV-Vorsorgekasse AG

Short description

The UN Sustainable Development Goal #13 calls for urgent action to combat climate change and its impacts. WWF considers the private sector to be part of the solution and supports companies through science-based target (SBT) setting in this process.

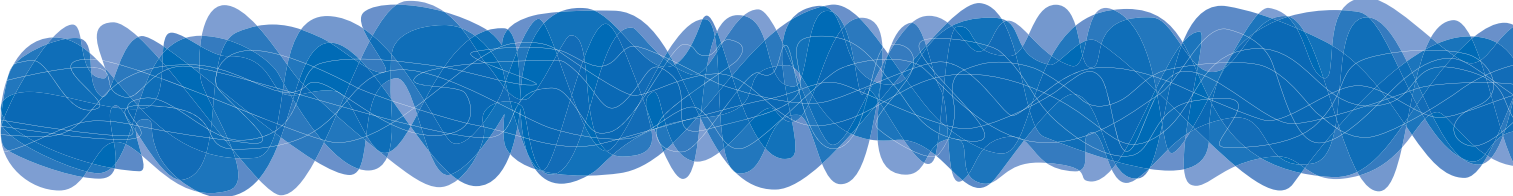
Together with the WWF CLIMATE GROUP, WWF Austria takes action with committed company leaders. This session highlighted current challenges and solutions as well as ways in which companies can positively influence climate protection beyond their company borders. Besides drawing a picture of the current business landscape and providing new perspectives, approaches and ideas on how action for SDG #13 can be taken, company representatives received concrete inputs on how science-based targets (SBTs) can support and strengthen their commitments.

Most intensively discussed topics

The overall topic of discussion was how companies can contribute to climate action and how they can use SBTs to do so. There was intensive debate among the panel about whether companies should wait for policy makers or take action regardless. According to Lukas Meyer, government needs to play a major role in bringing us together and enabling coordinated, collective action to combat climate change. However, all speakers agreed that enterprises and individuals also need to push forward and take ambitious measures.

New ideas contributing to transformation

The panel discussion resulted in many interesting ideas, such as questioning the actual products themselves and not only reducing their environmental footprint. We need to reduce our consumption and take very ambitious climate protection measures. “Business as usual” and following the actions of the mainstream is not enough, we need to leave our paths and do more. Verena Anger (gugler) stated that we need to go so far that even when others are saying that we are already doing enough, we can still do more, as we will not have another chance to combat global warming. Moreover, companies must shift to a long-term view and we need to fundamentally change the ways the economy produces



value. SBTs can help shift the focus to the next 10-15 years and achieve these mid- and long-term climate goals.

Summary

Prof. Lukas Meyer (University of Graz) talked in his opening keynote about the urgency of limiting global warming to well below 2°C while ensuring a fair transformation. Implementing the Paris Agreement leaves us with a 'carbon budget' for remaining GHG emissions and governments, businesses and individuals must step up to ensure that we do not exceed our carbon budget. Business as usual is not an option. After this inspiring keynote, three ignite presentations by company representatives followed.

Martin Bruckner (Chief Investment Officer, Allianz Austria) outlined how Allianz shows climate leadership. Allianz has joined the Science-Based Target initiative (SBTi), showing its ambition to decarbonize investments and global operations. In Austria, WWF and Allianz work on increasing the share of sustainable investments in Allianz' total portfolio.

Verena Anger (Sustainability Manager, gugler*) explained how gugler*, a longstanding member of the WWF CLIMATE GROUP in Austria, implemented a holistic approach to sustainability, including a strong focus on reducing its carbon footprint. Besides using 100% renewable energy and compensation of remaining GHG emissions, gugler* pioneered the Cradle2Cradle approach in the printing industry.

Alexander Farsan (Global SBT lead, WWF International) introduced the concept of SBTs, enabling businesses to contribute to a low carbon economy. Company targets to reduce GHG emissions are considered SBTs if they are in line with the level of decarbonisation required to keep global warming below 2°C. He also showcased international examples of SBTs from various sectors.

A panel discussion focused on the uptake of SBTs, stakeholders' reactions and potential trade-offs of climate action. Panellists agreed that stakeholders react positively to corporate climate action and that SBTs do not clash with growth targets.

Finally, two additional companies in the audience reflected on the discussion. Peter Eitzenberger (VBV Vorsorgekasse) said the financial industry needed to go ahead and reduce the carbon intensity of their investments. Irene Jakobi (A1 Telekom Austria) stressed the continued need awareness-raising on climate action among employees and customers.

Key message and the role of people in transformation processes

Employees have a very important role in achieving corporate climate protection measures. Involving them from the beginning of the process is key, as they will contribute to achieving the company's sustainability goals and take measures to reduce their own individual emissions. Ambitious and coordinated collective action is needed to limit global warming to 1.5/ well below 2°C.

Message

Business as usual is not an option for combating climate change.

Recommendation

Business is willing to take their fair share of responsibility, but need governments to take action.



SPECIAL SESSION: ELABORATING THE “CALL TO ACTION”

Session organiser

Federal Ministry for Sustainability and Tourism, Austria

Moderation

CORINNA MILBORN and PETER WOODWARD, Conference Facilitators

Speaker

HANS BRUYNINCKX, Executive Director, European Environment Agency

Short description

The Call to Action was drafted by the conference organisers together with the session hosts. This draft version was then further developed with participants at the special session “Elaborating the “Call to Action” on November 15, 13:50-15:20. The session was guided by Hans Bruyninckx, Executive Director of the European Environment Agency. The “Call to Action” was presented to all participants on the first day of the conference and made available online.

In this session, the draft version of the “Call to Action” was discussed with participants, in particular with the young people taking part. The “Call to Action” comprised the main conclusions in matters of policy options and priorities to be set as next steps as well as an outlook for future activities of the Growth in Transition initiative (You can find the “Call to Action” here: <https://wachstumimwandel.at/conference2018/documentation/documents/>).

Most intensively discussed topics

This session had an interactive design focusing on audience input. The object of most intensive discussion was the role of people within the transformation towards a sustainable economic and social system. Two aspects in this regard were discussed. The first consideration was how individuals can change their way of life in order to be more sustainable. The second theme discussed concerned how individuals can exercise pressure on political institutions, such as the EU, to achieve more progressive environmental and social legislation.

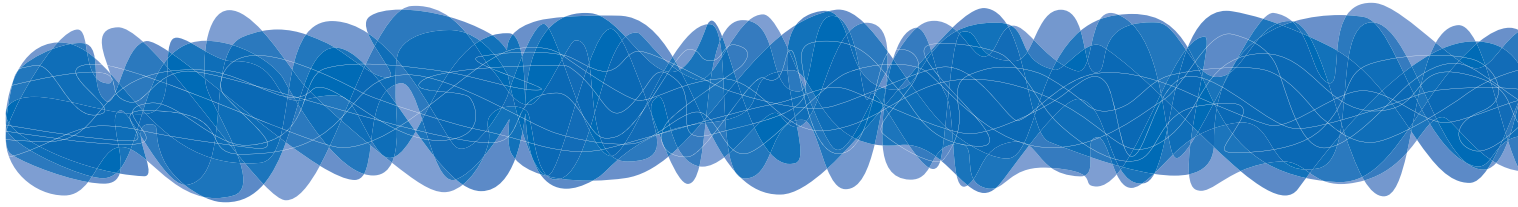
New ideas contributing to transformation

At the core of the discussion was the idea that the people themselves take ownership over the transformation towards a green economy and not wait for politicians to present them with environmental-friendly legislation. Especially participating young people were clear about what our future on this planet should look like. The moderator and speaker supported the participants in these demands, offering to provide a channel for their demands to be heard and an opportunity to take necessary steps towards ecological transformation.

Summary

Following an introduction by the moderator, Hans Bruyninckx gave a presentation on the challenges the world and the EU in particular face in their endeavour to provide a good living for everyone within the limits of our planet. He showed that there are a number of countries that live within the ecological boundaries of our planet but are currently unable to provide a decent living standard for the majority of their population. On the other side of the spectrum, several countries are able to provide a high living standard for their population but do not manage to achieve this within existing planetary boundaries. The point at which a country manages to provide a high living standard without exceeding the planet’s natural resources was identified as the destination that all countries should strive for.

He stressed that an active and proactive civil society is needed to achieve and maintain a high living standard in a sustainable manner. It is important to constantly challenge politicians and other people



in influential positions to insist they live up to their ecological responsibility and no longer rely on the guidance of the political and business elite.

In striving to achieve a sustainable future, we need to employ a multitude of approaches that take into account local cultural and economic needs without losing sight of the bigger picture. Rural areas require different solutions regarding issues such as mobility and housing than big cities, while cities and rural areas also differ around the world. This does not imply that we should lose ourselves in particularities and isolation but rather that we need to share knowledge and responsibilities in order to overcome these problems. Furthermore, it is crucial to constantly challenge our habits and to be bold in tackling unsustainable ways of life. The youth of today will be pivotal in bringing about these changes.

Key message and the role of people in transformation processes

Message

People are at the core of ecological transformation. They are both the target, in the sense of unsustainable ways of life, and the actors that will bring about necessary changes when tackling unsustainable patterns of consumption. It is no longer the case that the wider public can sit back and trust in their leaders to achieve this on their behalf.



THE SDGS AS COMPASS FOR TRANSFORMATION

Session organiser

Austrian Institute of Economic Research (WIFO)

Moderation

BEATE LITTIG, Head of the Division Socio-Ecological Transformation Research, Institute for Advanced Studies

Keynotespeaker

NEBOJSA NAKICENOVIC, Deputy Director, The International Institute for Applied Systems Analysis (IIASA)

Panel guests

FRIEDRICH HINTERBERGER, Researcher, SERI – Sustainable Europe Research Institute

DANIELA KLETZAN-SLAMANIG, Senior Researcher, Austrian Institute of Economic Research

WILLI HAAS, Senior Researcher, Institute of Social Ecology, BOKU University of Natural Resources and Life Sciences Vienna

Short description

The challenges related to achieving the UN SDGs require fundamental transformations. Whereas the SDGs have been globally accepted as political targets, more research to provide a knowledge basis for their successful implementation is needed. Synergies and trade-offs between the different SDGs and the corresponding sub-targets is one pressing question, and was addressed in the session's keynote speech by Nebojsa Nakicenovic. The panel discussion took up these aspects and put the focus on Austria.

Most intensively discussed topics

The session stressed the need for careful investigation of interactions between the 17 UN SDGs and pointed out that lifestyles and behaviours need to be changed in order to achieve the SDGs. Coherent policies are seen as enabling a guiding framework. A continuation along the traditional growth pathways would not be in line with the SDGs. It was emphasised that the monitoring of the SDGs requires comprehensive data that for a number of areas are not yet readily available. The role of economic growth in the context of the SDGs was discussed more broadly.

New ideas contributing to transformation

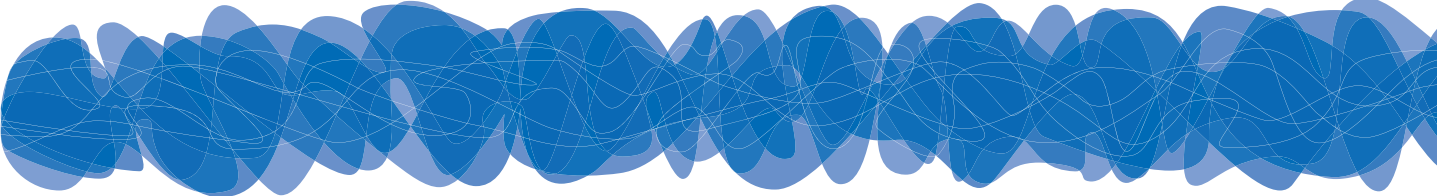
Interesting ideas discussed were: An integrated holistic perspective on SDGs, taking into account trade-offs and synergies; The need for coherent policies (no funding for conflicting measures, and no “box-ticking” exercises); The need for comprehensive measurement approaches (funding criteria, monitoring of SDGs).

Summary

Beate Littig opened the session and collected perspectives on the SDGs from the audience. She noted that even though the SDGs have been politically accepted, this does not mean there are clear rules on how they will be implemented and measured.

Nebojsa Nakicenovic stressed that given continuously rising GHG emissions, new lifestyles, behaviours and technologies are required. The SDGs need a holistic perspective. Nakicenovic pointed to the connections between SDG #7 Affordable and clean energy and other SDGs. He emphasised that there are more synergies than conflicts between them and argued that multiple benefits of integrated policies are possible. Key messages from the project The World in 2050 led by IIASA included that vigorous immediate action is required to attain the SDGs in a resilient way, putting the focus on people and the planet beyond 2030.

Friedrich Hinterberger, Daniela Kletzán-Slamanig and Willi Haas discussed perspectives on the SDGs with a focus on Austria.



Hinterberger presented the project MeetPASS, where the effects of different policies on the SDGs are investigated, as well as their direct and immediate consequences. He stressed the need for a holistic approach to the SDGs.

Kletzan-Slamanig presented the project CIEP that focuses on SDGs #7 and #13 and provides extended measurement approaches to evaluate progress towards meeting the Paris targets and SDGs. It focuses on welfare-relevant energy services and explicitly considers the social dimension, which is often left out of climate and energy debates. She also argued that interlinkages between indicators need to be carefully analysed.

Haas focused on the bio-economy, noting that there was an increase in biomass production (SDGs #7, #13, #8) that already violates SDGs #14 and #15 and may also influence SDGs #1 and #2. He called for dramatic behavioural change and for all policies to be assessed for potential contradictions with the SDGs.

Key message and the role of people in transformation processes

Transdisciplinarity was emphasised as very important for research and the achievement of the SDGs. In the research projects presented, however, transdisciplinarity has not been an issue, since they are oriented towards more basic research. The session concluded that the SDGs are considered relevant for research and politics but that, to use a compass metaphor, the needle is still turning.

Message

The challenges related to achieving the UN SDGs require fundamental transformation processes.

Recommendation

While the SDGs have been globally accepted as political targets, more research is needed to provide a knowledge basis for their successful implementation. Particular emphasis needs to be placed on synergies and trade-offs between the different SDGs and the corresponding sub-targets.



A JUST TRANSITION TO A LOW CARBON ECONOMY – THE ROLE OF LABOUR AND CIVIL SOCIETY

Session organisers

Chamber of Labour Vienna, Attac, GLOBAL 2000, PRO-GE

Moderation

ALEXANDRA STRICKNER, Attac

Speaker

SIGRID STAGL, Professor for Ecological Economics, Vienna University of Economics and Business

Panel guests

SYLVIA LEODOLTER, Chamber of Labour

PABLO SOLÓN ROMERO, Fundación Solón

JOHANNES WAHLMÜLLER, GLOBAL 2000

SUSI HASLINGER, Social Policy Expert, PRO-GE

Short description

The focus was on the role of labour, trade unions and civil society in a just social-ecological transformation to sustainability. Sigrid Stagl's keynote examined the role of work for the environment and societal relations. The panel discussion on the just transition, suggested that workers' voices must be heard and considered on the road to a low-carbon economy given its impact on jobs, livelihoods and consumption patterns. This was not only in order to minimise hardship, but also to build workers' support for sustainable transformation and environmental policies (instead of enforcing the false "jobs vs. environment dilemma" rhetoric). The welfare state and public institutions are key to ensuring citizens' rights and redistribution yet these were at risk from the surge in populist and right-wing political movements, hindering debate on "just transition".

Most intensively discussed topics

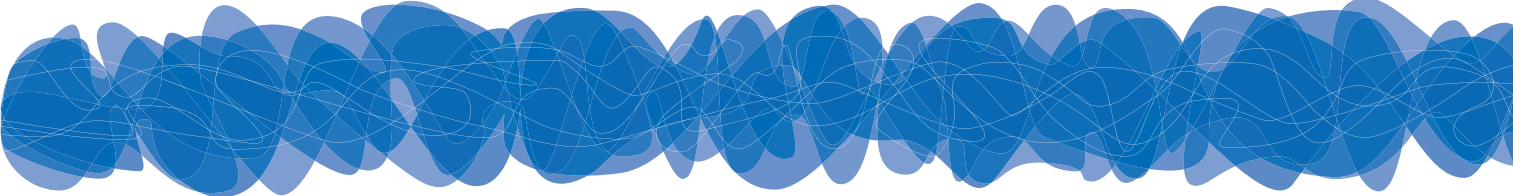
The topics discussed included the negative impacts of an anti-trade union institutional and governmental setting upon achieving worker-friendly environmental outcomes and a just transition, the importance of a gendered perspective on work, care work and paid employment; as well as the potential benefits of working time reduction, amongst many topics. There was very little dissent amongst the panellists, who all agreed that an ambitious, worker-led, just transition campaign and policy measures were needed for a socially just carbon climbdown (in order to promote human wellbeing and to avoid catastrophe).

New ideas contributing to transformation

Working time reduction could contribute to lowering environmental impacts, as well as increasing wellbeing and gender equality. Recalling Polányi, markets and "market rationality" should not be seen as a given: labour (market) is a fictitious commodity and markets must be re-embedded in society and the environment for a future that is socially and environmentally just. The session included a broad discussion on the importance of including workers in discussions over the future, and how this is currently achieved in different trade union organisations in Austria. The importance of democratising the economy for a sustainable future was also discussed. Removing the shareholder-profit element to ownership of natural resources is an important step towards social transformation.

Summary

Sigrid Stagl noted the lack of progress in workplace gender relations, and the environmental impact of working and production (still largely neglected compared to consumption-based impact studies). The consequences of efficiency and production targets are not only environmental but also social and societal, as 40-hour working weeks lead to an unequal division of care work and perpetuate unequal



gender relations. Evidence shows 12-hour working days are bad for health and wellbeing. Prof. Stagl referred to a Polányian analysis of the labour market as a fictitious commodity and the problems of considering markets as natural or inevitable. Working time reduction could help reduce environmental pressures, and create greater gender equity and wellbeing.

Susi Haslinger noted the important, but difficult, role of the unions for achieving sustainable work. For industrial workers' unions, the "jobs vs. environment" dilemma exists in the short term, as transformation has serious implications for people's livelihoods. The welfare state and the tax system have an important role in a just transition, while in the current political situation unions face a "dual attack".

Sylvia Leodolter spoke about the utopianism of just transition, when there is an everyday struggle to survive in an exploitative economy, but said utopian beliefs were also needed. Involving workers in discussions about their future is key, including focusing on decent work and its distribution.

Johannes Wahlmüller suggested that a carbon climbdown will happen sooner or later, but questioned whether it will be quick enough and socially just. Although it is still possible to stay below 1.5 degrees, Austria has not decreased emissions since 1990, and the damage could be significant.

Pablo Solón spoke about the experience of the Global South where informal work predominates, and the need to democratically control natural resources (natural gas in Bolivia). Regenerating the Earth's natural systems will require a lot of work; gendered care work is still undervalued in our masculine-centric societies. The issue of wealth redistribution must be addressed.

Key message and the role of people in transformation processes

Message

A Just Transition requires rethinking the distribution and concept of labour.

Recommendation

To secure a just transition, all societal groups – in particular trade unions and civil society organisations – must be included in decision-making processes.



BIOECONOMY – DESIGNED BY ALL OF US

Session organisers

Ecosocial Forum Austria, Vienna University of Economics and Business
Center for Social Innovation, University of Natural Resources and Life Sciences Vienna

Moderation

INES OMANN, Senior Researcher, Institute for Ecological Economics, Vienna University of Economics and Business

Speaker

ROSEMARIE STANGL, Professor of Soil Bioengineering and Landscape Construction, BOKU University of Natural Resources and Life Sciences Vienna

Short description

The European Commission has recently published a revised Bioeconomy Strategy, while Austria is currently working on and will soon present its own national strategy. The bioeconomy topic is thus at the centre of attention in the context of sustainable alternatives to our current unsustainable economic and societal models.

Put in the context of the Horizon 2020 project BLOOM (Boosting European Citizens' Knowledge and Awareness of Bioeconomy Research and Innovation), the overall focus of the workshop was to identify perceived chances and risks during the implementation of a bioeconomy.

Most intensively discussed topics

Session participants were divided into 6 sub-groups to discuss different aspects of the issue (3 spheres: environment, economy, society; and 2 specific applications: packaging and textiles)

There was a consensus that, overall, a bioeconomy holds more opportunities than risks in terms of implementation. However, concerns were raised that the bioeconomy might result in conflicts regarding over-exploitation of nature, rising consumption rates, monoculture agricultures or greenwashing.

New ideas contributing to transformation

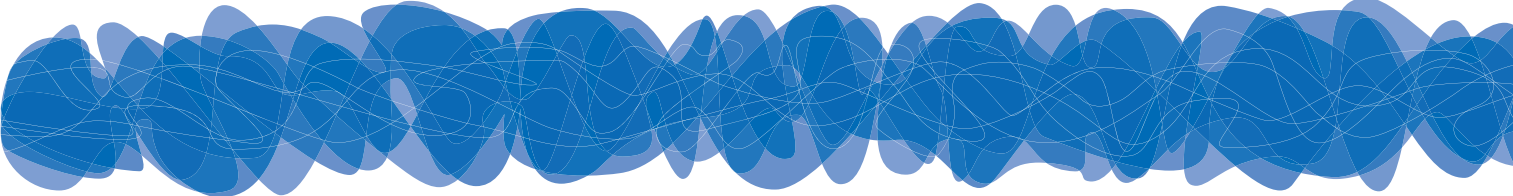
In the context of the conference as a whole, some participants linked the theme to critique of the growth dependency of the economic system and suggested that the bioeconomy might merely serve as a short-term justification for continuing 'business as usual'. These concerns were raised by several discussion groups, although sometimes in a less obvious way, hinting that the bioeconomy may not only require technological innovation, but first and foremost societal ones to overcome the frequently observed rebound effect.

Summary

While there is a general idea of the meaning of 'bioeconomy', it is an elusive concept leaving ample room for interpretation, so that people refer to different things when using the term. This renders the discussion on the bioeconomy an uneven playing field. Each participant seems to have their own idea of what a bioeconomy should constitute, often clearly diverging from definitions used by the EU or other international organisations.

This divergence in understanding might stem from the fact that different people have different points of contact with the concept and hence focus their understanding on diverse specific issues. A workshop exercise revealed these insights, after which Prof Stangl briefly set out a bioeconomy definition to provide a common understanding on which to base the workshop.

Participants were asked to sit at one of six tables to discuss one specific aspect of the bioeconomy. Several interesting points with considerable overlaps were raised in the sub-groups. The most important of these suggestions were then displayed, so that all session participants could then vote for the aspects they considered most important to be addressed by policy.



The following major opportunities were identified: circular use of resources, which would otherwise be discarded as waste, building local economies and countering rural depopulation, changing consumption patterns, reducing (microplastic) pollution and emissions, and reducing health risks.

Meanwhile, the following risks were identified as being highest priority by workshop participants: biodiversity loss, rebound effects and justification for even higher consumption overall, overexploitation of land, risk of monoculture, greenwashing, as well as cheap competition of fossil-based products, rendering the bioeconomy uncompetitive.

Key message and the role of people in transformation processes

Since the bioeconomy will play a major role in the future and will encompass more and more sectors, it must concern everybody, at least in their role as citizens and customers. Moreover, an economy based on renewable materials and without carbon emissions will provide economic opportunities, especially during the transition period.

Message

The implementation of bioeconomy bears opportunities and risks to environment, economy and society, we have to make sure to address them.

Recommendation

Policies have to guarantee that products do not get too expensive, that biodiversity loss is avoided and that an eye is kept on the rebound effect.



THE BUILT ENVIRONMENT IN TRANSITION – ADAPTATION OF PRODUCTION AND CONSUMPTION PATTERNS IN THE D-A-CH REGION

Session organiser

Federal Ministry for Education, Science and Research, Graz University of Technology

Moderation

ALEXANDER PASSER, Professor for Sustainable Construction at Graz University of Technology

Speaker/Panel Guests

JOSEFINA LINDBLOM, DG Environment, European Commission

THOMAS LÜTZKENDORF, Director of the Centre for Real Estate at Karlsruhe Institute of Technology (KIT)

GUILLAUME HABERT, Chair of Sustainable Construction, ETH Zürich

OSKAR MAIR AM TINKHOF, Salzburg Institute for Regional Planning and Housing

GÜNTER GETZINGER, Professor, Graz University of Technology

Short description

The aim of the session was to underline the need for transformation of the built environment. Given the economic importance of the construction and real estate sector covering our human needs for shelter and infrastructure and the high anthropogenic material flows, energy demand and associated emissions, there is a great need for action in the direction of sustainable development. To tackle these challenges in line with the Global Grand Challenges, UN Agenda 2030 for Sustainable Development and the Paris Climate Agreement, a paradigm shift of production technologies and consumption patterns is needed in the construction industry (planners and contractors), by procurers (public and private investors, real estate sector) and on the demand side (user needs and user behaviour).

Most intensively discussed topics

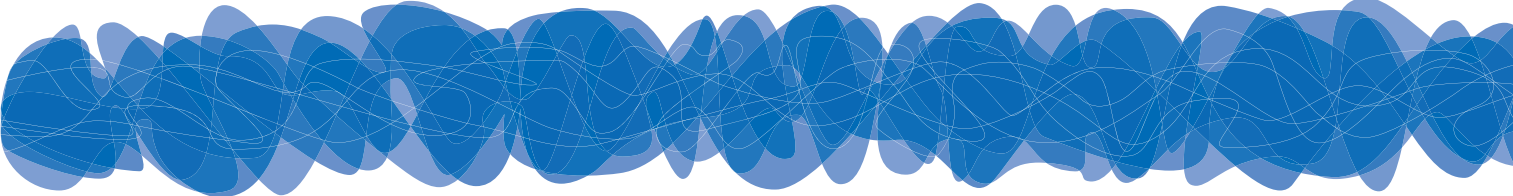
There was intense discussion about how to contribute to sustainable development in the construction industry and real estate sector as well as in urban and district development. It became clear that existing solutions needed to be in demand and actively used. Participants were united in elaborating the special role of the actors who can and must incorporate sustainability aspects into their decisions in their respective areas of work and responsibility. The question remained unanswered as to whether the individual and institutional self-interest for preserving natural livelihoods and market-based mechanisms (such as risk analysis and avoidance) would be sufficient or if and to what extent the state would have to intervene through developments and subsidies.

New ideas contributing to transformation

The discussion focused on the need to adapt production and consumption patterns in the construction and real estate industries. The construction and real estate sector are in a position to make a decisive contribution to climate protection and resource conservation. In order to exploit this potential, buildings stocks must themselves be seen as a resource that requires optimal management by the respective actors and adaption to current challenges and needs. Such adjustments and evolutions are normal tasks in the life cycle of real estate, which can and must be prepared both technically and financially. The further development of building stocks creates and maintains jobs and secures economic and cultural values. An earlier growth in energy consumption and environmental demand will translate into growth of responsibility and growth in employment and quality of life.

Summary

The session discussed the basics and tools available to actors in the construction and real estate industries as well as possible approaches to their adaptation.



Lützkendorf proposed the development of interrelations between the SDGs. SDG 11 represents an action-oriented goal and SDG 12 a solution that involves actors on the supply and demand side. In this context, the aim is to preserve the quality of life achieved in Central Europe while at the same time reducing its environmental impact. He stated this would result in a new approach to efficiency considerations.

Habert noted the importance of the construction industry, including the building sector, with regard to the energy and material flows it causes, which are still underestimated compared to other sectors. He presented solutions leading to environmental relief through new products and technologies. The construction industry is thus in a position to make a decisive contribution to the conservation of resources and environmental protection.

Lindblom emphasized the need to implement sustainable development principles across the full spectrum of the market. LEVEL(s) presented a robust tool for capturing and assessing the sustainability characteristics of buildings and building stock, enabling decision makers to recognize and adjust the impact of their own decisions.

Mair am Tinkhof extended the system boundaries of the topic to consider urban districts and clarified the meaning of actor constellations. He also explored the potential of using robust planning and decision-making tools that, alongside global issues, include the individual and institutional issues of local actors. The district level in particular provides a platform for the joint action of actors.

Finally, Getzinger explained the material and information required for actors to take purposeful measures and elaborated suggestions for improving the situation.

Key message and the role of people in transformation processes

Through implementation of sustainable development principles in the construction and real estate industry, interactions between all actors play a crucial role. The adaptation of production and consumption patterns to current and future challenges (including climate change, resource conservation and resilience) requires information exchange on energy and material flows as well as environmental impacts along the value chain in order to make decisions on an impact assessment based on economy, environment and society. Appropriate tools, such as labels, sustainability rating systems and building passes can help players make decisions in the interests of sustainable solutions.

Message

The implementation of the principles of sustainable development in the construction sector and real estate industry requires a rapid transition towards net zero greenhouse gas emissions, resource conservation, and resilience strategies i.e. the adaptation of the production and consumption patterns of all actors along the value chain. Increased awareness of environmental and social responsibility improves competitive position and reputation and generates new demands.

Recommendation

Collecting, assessing and exchanging information on energy and material flows and environmental and health impacts in the planning and lifecycle of buildings must become a matter of course, and appropriate data and tools are needed. Measures to improve climate protection must also be subjected to a holistic sustainability assessment.



CONCLUSION, CALL TO ACTION AND KEY MESSAGES

Peter Woodward, one of the main facilitators, opened the session by outlining the common purpose of achieving a shared future that makes sense. One common conclusion from the last two days was that Europe and the world is off track in terms of achieving sustainable development and mitigating climate change. However, there are still possibilities and chances, particularly in a European context, to demonstrate pathways towards a sustainable life for all.

Corinna Milborn added that the main purpose of this conference was not to talk but to create results. Participants were able to connect, hold conversations and actively participate in sessions, and key messages and recommendations of each parallel sessions were formulated (Please note, key messages of each session can be found at the end of each session description as well as in the separate document at the website <https://wachstumimwandel.at/conference2018/documentation/>).

Presentation of the “Call to Action”

HANS BRUYNINCKX, Executive Director of the European Environment Agency

Hans Bruyninckx, Executive Director of the European Environment Agency, started by defining the meaning of a good life, namely education, food, safety, wealth and fulfilment of core human needs and desires. The challenge is to match this good life with an increasing world population and to organise it within the limits of this single planet.

Hans Bruyninckx explained the 20th century’s story as a description of the environmental Kuznets Curve, concluding that the theory does not fit today’s challenges. He outlined that if 7 billion people reach the level we call a good life, the world’s bio-capacity will be exhausted. He stressed that in the 21st century, every country needs to reach a point of sustainability. To get there, we need to work together with countries such as South Africa, Brazil, China, Indonesia, Russia, USA and Japan.

Referring to scientific evidence, he stressed that there are reasons to worry about developments and that is very urgent to take action. The idea of the 6th Extinction is commonly discussed, where biodiversity is lost and according to the International Resource Panel, it is clear that we have an unsustainable level of resource use. Bruyninckx pointed out that everybody was coming to the same conclusion: that urgent action is needed!

Hans Bruyninckx claimed that at the European level, the 7th Environment Action Programme, which is currently being evaluated, embeds the strong vision of sustainability in the SDGs and three transitions are needed: lowering carbon emissions; moving from a linear model of resource use to a circular model; and last but not least protecting natural capital, biodiversity and ecosystems – something we do not emphasise enough.

The long-term 7th EAP vision of “living well within the planet’s ecological limits” cannot be achieved with established environmental policies alone. A more systemic, sustainability framework is needed that leads to fundamental shifts in production-consumption systems.

Hans Bruyninckx concluded that the Sustainable Goals are indeed a strong global framework and that a stronger European response on the SDG is needed (also mentioned in the Call to Action). Furthermore, an 8th Environmental Action Program, that embeds the environmental and climate dimension, has a great value. Moreover, it is essential to make use of the full potential of integrating policies and addressing systemic problems with strong systemic policies. He pointed out that, since we are talking about societal transformation by definition, it would require more than only political decisions and that continued pressure from civil society is required.

The Call to Action

Peter Woodward concluded that the aim of this conference was to bring ideas and brains together to shape transition journeys going forward and to put people at the heart of the change agenda. A further aim was to formulate a strong message to leaders and politicians at a time of transition, thinking about the vision and new ways forward within the European project. The Call to Action was developed over the two days and some very powerful messages have come out as a result.



Presentation of the “Call to Action”

HANS BRUYNINCKX, Executive Director of the European Environment Agency

The Call to Action comprises 10 goals:

- 1 The first goal refers to the SDGs and embraces them as a vision with a strong strategic approach at the European level, with clear timelines, and monitoring system and a reporting system.
- 2 To foster eco innovation it is necessary to help eco innovative companies to overcome the barriers of market entry and to focus on inspiring practitioners.
- 3 Regarding sustainable finance, there is a clear message that this is viewed as a key enabler for transition. The financial system has to go through a transition of its own and the European Union`s legislative initiative should pursue ambitious targets.
- 4 In terms of democracy, it is clear, that if societies go through this type of transition, we need to take citizens very seriously, at local level. Participation is a key word in this process.
- 5 Concerning financial support for research, a strong emphasis is to not only address technology, but also social innovation research, and the link with the bioeconomy. In general a strong systemic, strategic and transition oriented research under Horizon Europe is needed.
- 6 The creative idea of a sustainability museum or laboratory, where social innovation of crucial ideas for sustainable development, is fundamental. It is important to have open spaces to connect people to co-created holistic sustainability approaches.
- 7 Regarding the role of media in encouraging transformation, the goal is to support a strong, reliable, trustworthy landscape of critical journalism and freedom of the press.
- 8 Concerning the digital economy, it is necessary to enable citizens and businesses to make sustainable choices and to empower them. The goal is not more noise, but better sound.
- 9 Lifelong learning and education is key.
- 10 Eventually the internationalization of the Initiative Growth in Transition is crucial. The goal is to strengthen this type of platform on the European scale and to strengthen the global dimension, contributing to stronger governance on a global scale.

Sounding Board – Stakeholder Panel Discussion on the “Call to Action”

ELISABETH KÖSTINGER

Federal Minister for Sustainability and Tourism of Austria

HANS BRUYNINCKX

Executive Director of the European Environment Agency

Frans Timmermans

First Vice-President of the European Commission

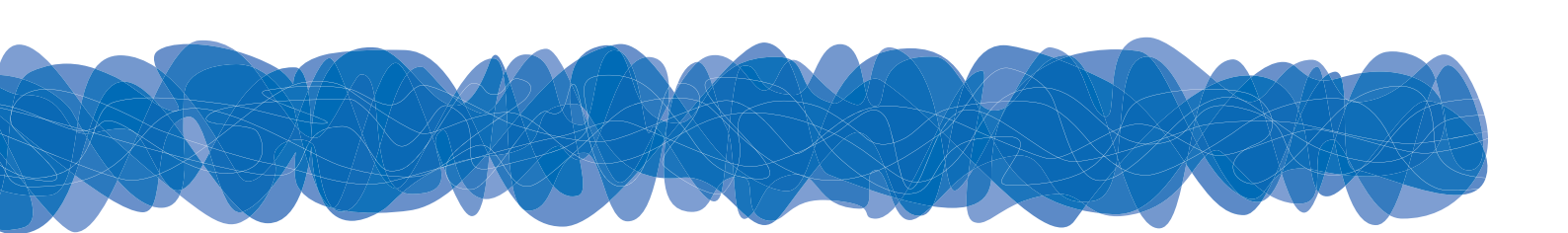
BRENDA KIND

Chief Executive of African & Caribbean Diversity, Member of the European Economic and Social Committee (EESC) and Former President of the Sustainable Development Observatory

CHRISTOPH THUN-HOHENSTEIN

General Director and Artistic Director, Austrian Museum of Applied Arts / Contemporary Art; Head, Vienna Biennale, Vienna

Frans Timmermans, First Vice-President of the European Commission, commented that to motivate citizens regarding those topics it is necessary to create images and policies that people can immediately relate to. As policy makers and the civil society, it is important to keep track of the holistic approach of what to achieve and communication has to be consistent. He stressed the importance of creating enthusiasm for the top-



ics in society. Algorithms cannot replace our capacity for critical thinking, which is the key to future engagement by new generations.

Brenda King, Chief Executive of African & Caribbean Diversity, European Economic and Social Committee, summarised that we are dealing with very complex issues that for the first time bring together the economic, the social and the environmental sector. She highlighted that when listening to the comments by students from the Sir Karl Popper school, who had joined some sessions over the two days, not one of them had mentioned complexity, but instead, emphasised the need to push the topics harder. She felt it was important to include those who understand the complexity and who are committed to selling this complex message.

Christoph Thun-Hohenstein, General Director and Artistic Director of MAK (Museum of Applied Arts) and Head of the Vienna Biennale, stressed that it was crucial to never lose sight of the holistic concept in order to solve this problem. It was also important to deliver the message. Communication design was a fantastic discipline capable of making complex things appear simple to people. At every moment and in decision someone takes, we are designing our future. In that sense, everybody is a sustainability futurist. Thun-Hohenstein recommended education, literacy and museums designed as labs for the future. A new design avant-garde, which is in the making, should be able to cooperate with government, the business world or start-ups. Finally he suggested that artificial intelligence will play a major role in the future, stressing that Europe should not head towards China and the US, but try to develop new deep learning processes and programmes that are based on values and sustainability, including critical thinking.

Closing Speech

FRANS TIMMERMANS

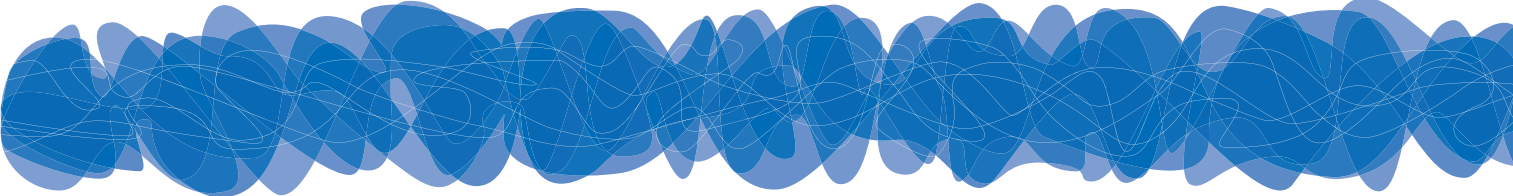
First Vice-President of the European Commission

Frans Timmermans, First Vice President of the European commission, having listened to the closing session, changed some aspects of his planned remarks and shared his reflections on the preliminary presentations and the sounding board. Frans Timmermans highlighted that the global community is at the first stage of the 4th Industrial Revolution, which is the most intrusive revolution humanity has ever known and that affects every single human being on our planet.

He stressed that humanity, for the first time, is confronted by the limits of our planet. Many people are on the verge of reaching a certain level of development, which, however, under present conditions would not be sustainable, although it cannot be the solution to let those people stay poor. Humanity understands that the planet is reaching its limits, but has not found a common approach to tackle this yet. He stressed that one useful approach are the SDGs and there is cause for optimism because a huge shift in the private sector is in the making, leading to new business models. The European Commission tries to capture those developments to create consistent policies to enable a circular economy.

However, none of the challenges the audience faced during the conference are impossible to solve. He argues that science has the potential to solve those challenges, highlighting that this is an incredible positive conclusion to be able to draw. The discussion is always about complexity, but would it not be boring if it were simple, Frans Timmermans asked. Referring to his own children, he mentioned that the new generation is not driven by ideologies anymore but by ideals. There is a chance to construct a society based on ideals, which does not need to be framed by ideologies.

Frans Timmermans explained that people in Europe seem to be relatively comfortable about the situation today but worry about tomorrow. It is underestimated that a lot of questions and uncertainty occur regarding the future. Nationalism movements build upon this uncertainty. Therefore it is important to offer instruments that give people sufficient and credible guarantee that they are in control of their own destiny, individually as well as collectively. Demographic and geographic solidarity of society is needed to avoid conflicts. It is crucial to encourage people to be part of transformation in a global context and to stand up to today's challenges. Building bridges is therefore part of the sustainability agenda. Finally, referring to artificial intelligence, he concluded that we do not move as fast as other parts of the world, but this is due to moral concerns. For him, acting from a moral perspective is a special quality of the European Union. The ethical dimension of artificial intelligence must be taken into account to not get things terribly wrong. He refers to the crucial example of algorithms not just



supporting society but also selecting information for it. He highlighted that it is very important to re-think algorithms to support our critical thinking and not decrease it. This is a crucial point for future education.

Frans Timmermans concluded by pointing out that there are an increasing number of countries that understand that a transition within an international environment is necessary. He highlighted the importance of the SDGs and the crucial need to continue working on all of the 17 SDGs. He noted that Europe can play a leading role in ensuring that the SDGs bring a sustainable future that people can believe in all across the world.

ELISABETH KÖSTINGER

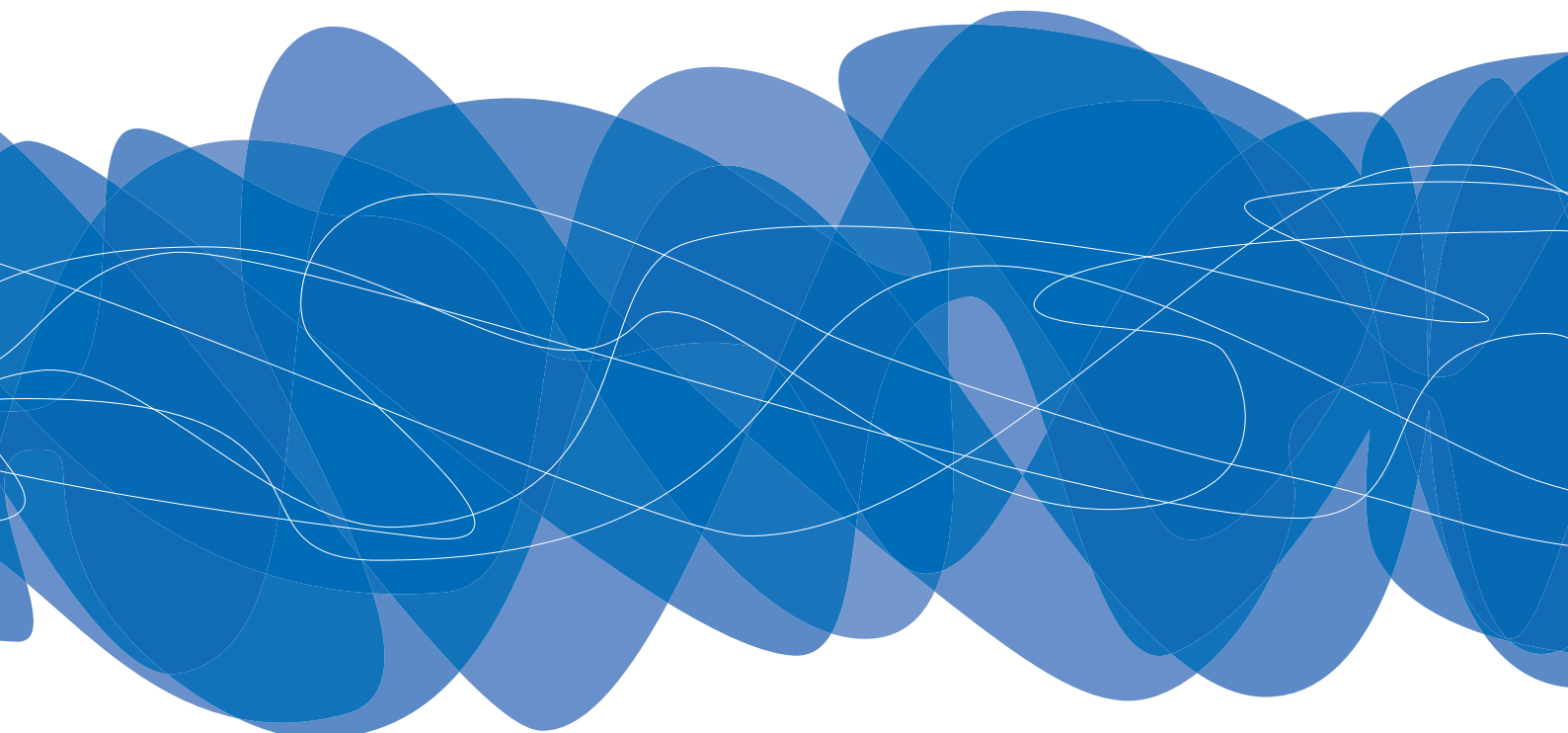
Federal Minister for Sustainability and Tourism

The Federal Minister for Sustainability and Tourism expressed great thanks to the First Vice-President of the European Commission Frans Timmermans for the inspiring speech. She was truly encouraged by the vital discussion and active participation from all the experts and stakeholders participating at the conference, she added. The Growth in Transition initiative has noticeably grown in relevance.

She added that this conference underlined the growing relevance of promoting a shift in how we think and talk about growth. The gradual rise of social businesses across our continent shows that Europe is in fact undergoing a transformation, which lights up the view in the future. In addition, she stated that listening to a pioneer in the field of transition, Mr. Ban Ki-moon, was inspiring and shows the importance of such an event. One goal was to contribute a concrete paper at the European level. This was achieved in the Call to Action. Elisabeth Köstinger expressed a special thanks to the stakeholders and all involved in the conference. She hoped the Growth in Transition initiative would continue to grow. We do not wait for the future we build it, she concluded. The Federal Minister of Sustainability and Tourism ended her speech with the appeal to use the Call to Action as advice on how to proactively grow a sustainable future.



This event fulfills the Österreichische Umweltzeichen eco-label's criteria for green meetings.



*The idea of a non-growing economy may be an anathema to an economist.
But the idea of a continually growing economy is an anathema to an ecologist.*

Tim Jackson

