

IASS NEWSLETTER 2/2016

Institute for Advanced Sustainability Studies (IASS) | Potsdam, April 2016

Dear readers, Contents

The new IASS Board of Directors is now complete. Political scientist Patrizia Nanz took up her post as the Institute's third scientific director in early April. The board's cooperative approach to leadership is also new: "As an institute that promotes the active participation of civil society actors in shaping the future together, it is imperative that this participatory approach is reflected in our leadership structure," explains Patrizia Nanz. The new leadership team and their research interests are presented in this issue of our newsletter. Researchers at the IASS are also working to implement the United Nations Sustainable Development Goals. Germany ranks among the world's leading consumers of natural resources. How can we change such unsustainable patterns of production and consumption? This question and more will be the focus of our conference in Berlin on 2 – 4 May 2016.

With best regards,
IASS Press & Communications Team

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NEWS FROM THE IASS







Patrizia Nanz Joins IASS as Scientific Director - New Leadership Team Takes the Helm

With its focus on knowledge- and research-based transformations towards a sustainable society, the new leadership of the Institute for Advanced Sustainability Studies (IASS) presented itself to the public. Patrizia Nanz, an expert on public participation, joined the IASS Board of Directors on 1 April to work alongside atmospheric scientist Mark G. Lawrence, risk researcher Ortwin Renn, and administrative director Katja Carson. **Read more...**

Consumption and Production in an Age of Diminishing Resources: Conference on Germany's Role in the Implementation of the SDGs

17 goals and 169 targets: the Agenda for Sustainable Development (2030 Agenda) adopted by the United Nations in September 2015 is as ambitious as it is complex. The Agenda's practical implementation and the associated challenges will be the focus of the conference "Jump-starting the SDGs in Germany: Natural Resources and Sustainable Consumption and Production", which will be held in Berlin on 2-4 May 2016. **Read more...**

Secure and Sustainable Energy in a Water-Constrained World: IASS Researchers Publish Policy Recommendations

The global water needs of the energy sector are large. Without policy changes, they will increase greatly in the future, argue researchers from the IASS in a recently published Policy Brief. Already today, water constraints represent a risk to a secure electricity supply. **Read more...**

NEWS FROM THE IASS

Energy

How is Germany Contributing to a Global Energy Transition? New IASS Study Highlights Growth in Renewable Energies

The German energy transition has an international signal effect. The transformation of the German electricity sector has attracted intense interest around the world. With its domestic support scheme for renewable energy sources, Germany has made a substantial contribution to the global development of wind energy and photovoltaic technologies and helped to drive down costs. **Read more...**

More Cooperation, Eliminating the Middleman in Electricity Sales: Citizen-owned Wind Farms React to Changed Conditions

Citizen cooperatives engaged in wind energy projects need to change tack across Europe in order to adapt to changes in the operational environment, including modifications to funding instruments and dwindling political support for small and local wind-farm operators. **Read more...**

Climate

Climate Change Could Lead to More High-Ozone Events in Central Europe

In large parts of Central Europe, extreme ozone events frequently concur with higher temperatures. Under future climate change, with heatwaves forecast to become stronger and more frequent, it is likely that these areas will experience more high ozone events. Other parts of Europe could be much less affected as a new study shows. **Read more...**

Imagining Climate Engineering Governance: Are Foresight and Scenarios Useful Tools?

Debate around the controversial idea of solar radiation management (SRM) has intensified in recent years. The governance of climate interventions of this type has been central to this discussion. IASS researchers have examined a range of proposals and present their findings in a new publication. **Read more...**

IASS PUBLICATIONS



Secure and Sustainable
 Energy in a Water Constrained World,
 Röhrkasten, S., Schäuble,
 D., Helgenberger, S., (IASS)



■ The Germany Energy Transition in International Perspective. Quitzow, R., Röhrkasten, S., Jänicke, M., (IASS)

NEWS FROM THE IASS

Participation

Citizen Participation in the Energy Transition: Researchers Present Findings

A majority of the German population supports the energy transition in principle. Nevertheless, projects such as the construction of windfarms and transmission lines often meet with resistance from residents, citizen-led initiatives, local authorities, and representatives at state level. Processes of citizen participation can help to generate acceptance for infrastructure projects. But what does it take to make a participation process a success? **Read more...**

Society

How Can We Encourage Collective Behaviour Change Towards Sustainable Futures? Experts Develop New Approaches at the IASS

Climate change, biodiversity loss, and the global limits of essential natural resources: a growing body of scientific information exists about the rapid global changes that impose critical challenges on human societies. What remains unclear, however, is precisely how we could change human behaviours and practices to deliver a future that is just, equitable, and sustainable.

Read more...

"Science Thrives in Open-minded Environments": An Open Letter from the Directors of Research Institutes in Potsdam

There is no place in Potsdam for hostility towards foreigners and those seeking refuge, argue the heads of educational and research institutes in Potsdam in an open letter published on 16 March 2016 in the Märkischen Allgemeinen, the Potsdamer Neuesten Nachrichten and other newspapers. **Read more...**

IASS PUBLICATIONS



■ Solar Radiation Management: Foresight for Governance, Boettcher, M. (IASS), Gabriel, J. (Foresight Intelligence), Low, S. (IASS)



■ The Future of Africa's Energy Supply. Potentials and Development Options for Renewable Energy. Quitzow, R., Röhrkasten, S., Jacobs, D., Bayer, B., Jamea, M. E., Waweru, Y., Matschoss, P., (IASS)

Institute

Patrizia Nanz Joins IASS as Scientific Director - New Leadership Team Takes the Helm



The new leadership team has set itself the task of further positioning the IASS, which was founded in Potsdam in 2009, as a major international platform for international platform for international research for global sustainable development.

To achieve this goal, the board has made a conscious decision to adopt a collaborative leadership model. "As an institute that promotes the active participation of societal actors in shaping the future together, it is imperative that this participatory approach is reflected in our leadership structure," explains Patrizia Nanz, the newest member of the board. The four board members will coordinate the institute's research agenda, transdisciplinary practice, and dialogue with policymakers and societal actors as a team. The long-standing member of the board, Mark G. Lawrence, has been elected to the post of managing scientific director and confirmed in this role by the General Assembly of the IASS. Appointments to this position are made for a term of two years.

Board unites expertise from broad spectrum of research

The four directors have backgrounds in different disciplines and areas of study, with expertise in the social and natural sciences as well as experience in knowledge co-creation at the intersection of science, policy-making and society, and the management of effective and flexible organisational structures for institutions working in the field of sustainability research.

Patrizia Nanz (right) receiving her certificate of appointment from Brandenburg's Minister of Science Martina Münch.

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© Patrizia Nanz: Stephan Meyer-Bergfeld, Ortwin Renn: acatech/David Ausserhofer, Katja Carson: IASS, Mark G. Lawrence: IASS/Michael Ingenweyen

Patrizia Nanz

Ortwin Renn

Katja Carson

Mark G. Lawrence

Patrizia Nanz: Political scientist and expert on public participation

As well as serving on the board of directors, Patrizia Nanz will take up a joint appointment as professor of transformative sustainability studies at the University of Potsdam. Her research at the IASS will address the challenge of embedding the values of intergenerational justice, self-reliance and long-term thinking within the democratic system, and will seek to identify the normative goals on which transformation should be focussed and the narratives that could anchor the principles of sustainability mentally and culturally within our society. Nanz also intends to contribute to the development of an empirically informed political theory of sustainability. In her capacity as the head of the research area "Culture of Participation" at the Institute for Advanced Study in the Humanities Essen (KWI), she has studied the role of participation as a mode for transformation and has initiated and supported numerous participatory processes with her expertise since 2013. Over the last three years, she has worked closely with the IASS and its founding director Klaus Töpfer in the joint IASS-KWI project Demoenergy. Nanz has held a professorship at the University of Bremen since 2002 and was a fellow at the Wissenschaftskolleg, Institute for Advanced Studies (Berlin), Westminster University (London), and Massachusetts Institute of Technology (MIT). Her latest book, Die Konsultative. Mehr Demokratie durch Bürgerbeteiligung [The Consultative. More Democracy through Citizen Participation], co-authored with Claus Leggewie (KWI), was published in early 2016.

Ortwin Renn: Environmental and technological sociologist

Ortwin Renn joined the IASS as scientific director on 1 February 2016. His research activities at the Institute will focus on the systemic risks that hinder sustainable development and threaten the environment, the economy, and society. The prerequisites and conditions of the transition to a sustainable national and international energy supply system will form a key focus of his work. Prior to his appointment, Renn was professor of technology assessment and environmental

sociology, and dean of the Faculty of Economics and Social Sciences at the University of Stuttgart. He was also the scientific director of the Centre for Interdisciplinary Risk and Innovation Research (ZIRIUS) attached to the university. His career has included teaching and research positions in Germany, the USA, and Switzerland.

Katja Carson: Administrative director

A qualified business administrator with a BA (Hons) in European Business Administration from Middlesex University London and an MBA from Henley Business School in the United Kingdom, Katja Carson has over twenty-five years' experience in leadership and management roles in Germany and abroad. She is a member of the management board of the IASS and will support the Institute's activities through the development of an effective administration model that fosters sustainable work and research practice. Carson develops and implements the Institute's internal sustainability strategies. As the organisational director of Greenpeace New Zealand (2009 - 2014), Carson held overall responsibility for administration, finance and budgeting, governance, personnel, IT, building services and infrastructure, and the leadership of interdisciplinary teams. In 2015 she held the role of interim head of global finance at Greenpeace International. Katja Carson joined the IASS as the head of administration in September 2015.

Mark G. Lawrence: Atmospheric and climate scientist

Mark Lawrence has contributed to the development of the IASS since 2011 in his capacity as scientific director and has been confirmed in this role by the General Assembly for a further five years. His research interests lie in the development of integrated solutions to climate change and air pollution, and the opportunities and risks presented by targeted interventions in the climate (climate engineering) as a means of reducing climate change, especially in the context of the Anthropocene and the relationship between humans and nature. The US-American scientist was previously a research group leader at the Max Planck Institute for Chemistry in Mainz, Germany. He was an interim professor of meteorology at the University of Mainz in the 2009/2010 academic year and has held an honorary professorship at the University of Potsdam since 2014.

SDGs

Consumption and Production in an Age of Diminishing Resources: Conference on Germany's Role in the Implementation of the SDGs



Source: UN in collaboration with Project Everyone

The German Federal Ministry of Food and Agriculture (BMEL) and the IASS have invited national and international representatives of governments, science, civil society, and private sector organisations to attend the conference and to discuss the particular role of Germany in the implementation of the 2030 Agenda.

New partnerships and the need to use resources sustainably – in particular through the adoption of new patterns of consumption and production – will rank high on the conference agenda.

Fostering knowledge flows through learning partnerships

The creation of "learning partnerships" between individual countries is an essential element of the 2030 Agenda. These partnerships will engage a broad spectrum of actors and provide diverse opportunities for mutual learning to drive the transformation process forward. Special attention will be given at the conference to the Swedish Government's initiative on "Implementing the 2030 Agenda for Sustainable Development, A Call to Action", a partnership of nine countries (Brazil, Germany, Colombia, Liberia, Sweden, South Africa, Tanzania, Timor-Leste, and Tunisia). This initiative strives to actively support the implementation of the 2030 Agenda, promotes the sharing of experiences and best practices, and encourages ongoing efforts to support the Agenda at the highest political level.

The **German government** has announced that it intends to work towards the realization of the Sustainable Development Goals on multiple levels:

- In Germany through the ongoing development of a national sustainability strategy.
- Through Germany abroad: because our patterns of consumption and production have huge impacts on land use, labour conditions, and the environment in other countries.
- With German assistance abroad: future development cooperation and financing must be guided by the SDGs.

Natural resources are indispensable for sustainable development

The 2030 Agenda emphasises that natural resources, such as fertile soils, safe drinking water and healthy ecosystems, are an indispensable basis for sustainable development. At the same time, the SDGs and their related targets place additional demands on our environment, particularly with respect to land, food, and water resources. For example, the sustainable management and efficient use of natural resources (Goal 15) is closely linked to sustainable food production systems and agricultural practices, to an increase in the share of renewables in the energy mix and to halting deforestation and land degradation. These competing demands must be reconciled with each other and implemented within an integrated perspective in order to achieve the goals of the 2030 Agenda as a whole.

Experts from a broad range of science and development backgrounds will discuss these challenges at the conference. Interactive panel discussions and dialogue forums will offer opportunities to explore in depth a range of key issues, including efficient resource use, food security and nutrition, bioenergy and land use.

Further information:

- The Role of Biomass in the Sustainable Development Goals: A Reality Check and Governance Implications, Müller, A., Weigelt, J., Götz, A., Schmidt, O., Lobos Alva, I., Matuschke, I., Ehling, U., Beringer, T. (IASS)
- For more information about the Sustainable Development Goals, see our dossier here.
- Find out more about the conference and view the programme.
- For registrations, see here.
- For press accreditations, contact:media@iass-potsdam.de.

Energy

Secure and Sustainable Energy in a Water-Constrained World: IASS Researchers Publish Policy Recommendations



A precious resource: water scarcity affects many regions. This should be reflected in decision-making within the energy sector.

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In many parts of the world, droughts and heatwaves have already led to forced reductions in power generation. Not surprisingly, hydropower has been the most affected energy source. However, generation from nuclear and coal power plants has also been curbed due to constraints on the water needed for cooling. With climate change and a globally rising water demand, competition for water resources will become more intense. Decision-makers will increasingly be forced to make tough choices on water allocation.

So far, energy decision-makers tend to mistakenly consider water an abundant resource that they do not need to worry about in planning. However, the choice of energy sources greatly affects the volumes of water needed for power generation. While technological solutions are available to increase the energy sector's resilience to water constraints, their potential is insufficiently exploited. Alliances between the water sector and water-friendly renewable energy sources can pave the way to meeting global water and energy needs, reconciling socio-economic development with planetary boundaries.

Further information:

■ Secure and Sustainable Energy in a Water-Constrained World, Röhrkasten, S., Schäuble, D., Helgenberger, S., (IASS)

Improving water and energy security

Against this background, the IASS came together with key partners to identify options for enhancing water and energy security at international water and energy conferences: the World Water Weeks 2014 and 2015, and the South Africa International Renewable Energy Conference (SAIREC) in 2015. The insights gained in these sessions have informed a recently published Policy Brief. To promote waterresilient electricity generation around the world, the IASS recommends taking the following three steps:

■ Recommendation 1: Increase the share of wind power and solar PV in water-scarce regions.

Wind power and solar PV are the least water-intensive electricity technologies. In addition, they contribute to mitigating climate-induced water risks due to their very low greenhouse gas emissions.

■ Recommendation 2: Incorporate water scarcity into energy decision-making.

Charging the energy sector for its water use in a way that better reflects actual water costs and scarcities can be a very effective way to improve water management in the sector. Integrating water scarcity into energy system models for public policy planning is a low-hanging fruit that can have major positive effects.

■ Recommendation 3: Enhance transparency on water use in the energy sector.

The limited data on actual water requirements in the energy sector in different parts of the world is a fundamental deficiency for informed decision-making. Both private companies and the public sector should therefore significantly improve their monitoring and reporting on water use.

Further information:

- The Water-Energy Nexus: Seeking Integrated Solutions Blogged by Sybille Röhrkasten
- More Water for the Middle
 East, More Energy for Europe?
 A Comparative Look at the
 Water-Energy Nexus
 Blogged by Dr Mohammed
 Qader

How is Germany Contributing to a Global Energy Transition? New IASS Study Highlights Growth in Renewable Energies



Germany is an important pioneer in the growth of renewables worldwide.

© istock

Germany's Renewable Energies Act (EEG) serves as a role model for other countries. Over 70 countries worldwide now use feed-in payments to successfully foster the generation of electricity from renewable energy sources. In addition to this, the German government has successfully lent its support to the global expansion of renewable energy. With its initiative to establish an International Renewable Energy Agency (IRENA), the German government put renewables on the international political agenda.

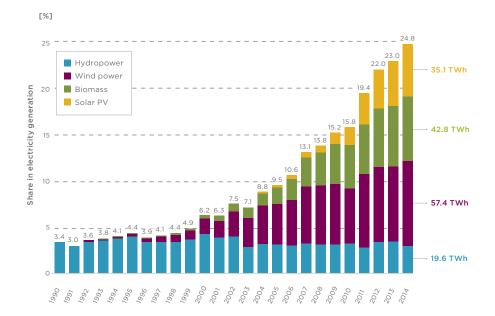
But the global energy transition is not driven by one pioneer alone. At times both international coverage and public debate in Germany give the impression that Germany's national energy transition and ambitious plans for the expansion of the renewable sector represent a deviation from international energy policy trends. However developments in recent years – in Europe and around the world – paint a different picture. Germany is not going it alone with its energy transition. Renewable energy sources are on the rise around the world. Statistics released by IRENA show that new capacity additions in the renewable sector have outstripped fossil fuel and nuclear capacity additions worldwide since 2013. Moreover, renewables are not only making progress in industrialised countries, but also in many developing and emerging economies.

Further information:

- The Germany Energy Transition in International Perspective. Quitzow, R., Röhrkasten, S., Jänicke, M., (IASS)
- The Future of Africa's Energy Supply. Potentials and Development Options for Renewable Energy. Quitzow, R., Röhrkasten, S., Jacobs, D., Bayer, B., Jamea, M. E., Waweru, Y., Matschoss, P., (IASS)

IASS publishes new study

The recently published IASS study "The Germany Energy Transition in International Perspective" examines the German energy transition within the context of the worldwide expansion of renewable energy. The study underscores the global significance of the German energy transition, while making it clear that the advances of the renewable energy sector is rooted in the dynamic interplay of an ensemble of further pioneering countries – in particular Japan, the USA, Denmark and China. The study focuses on the electricity sector as this is currently the site of the most significant expansion of renewable energy in Germany and worldwide.



Advantages of renewable energy sources

As the study reveals, it is the multifaceted benefits of renewable energy sources which make them the key drivers of a global energy transition. Not only do renewable energy sources contribute to climate protection efforts and improve the quality of environments at a local level, they also provide important opportunities for economic development. But, given the sharp increase in global energy demand and the negative environmental impacts of the existing energy system, the pace of their expansion is not yet sufficient. Important opportunities for social and economic development associated with an increased deployment of renewable energy remain untapped. With its international energy transition policy, Germany is well positioned to make a key contribution to building a sustainable global energy supply system.

Contribution of renewable energies to the electricity supply in Germany, 1990 - 2014.

© IASS, based on data from the BMWi

More Cooperation, Eliminating the Middleman in Electricity Sales: Citizen-owned Wind Farms React to Changed Conditions



An aerial view of Copenhagen: with more than 40 per cent of its electricity generated by wind, Denmark is the world leader in this field.

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Wind energy projects operated by citizen cooperatives are adapting to the changing policy environment. This is the conclusion of a study that has just been published in the journal Energy Research & Social Science. It compares changes in the operating environment in Germany, Denmark, Belgium and Great Britain, as well as ways in which citizen wind power cooperatives have reacted to them. The study shows that citizen wind power cooperatives are increasingly joining forces and getting involved in new business areas like electricity sales.

Citizen participation is important for the Energiewende

In the past, the energy supply system has tended to favour large players. In the four countries examined in the study, governments have attempted to foster citizen power cooperatives to varying degrees. With more than 40 per cent of its electricity generated by wind, Denmark is the world leader in this field. Citizen energy cooperatives have played no small part in the expansion of wind energy; at times, they have operated almost 80 per cent of all the country's wind turbines. In so doing, they benefited from stable feed-in tariffs and other regulations. In Germany, too, ordinary citizens became the main drivers of wind energy, thanks to the secure investment conditions enshrined in the Renewable Energies Act. In both of these countries, citizen involvement in the wind sector is much greater than in Belgium and the UK, whose support systems afforded few opportunities to small, new players.

Yet in forty expert interviews, the authors of the study discovered that despite the different framework conditions, there have been similar developments in all four countries. Energy expert Boris Gotchev, co-author of the study and project scientist at the IASS, sees a double movement here: "On the one hand, the conditions for citizen wind power cooperatives are increasingly hostile. In Germany and Denmark, for example, reforms of support mechanisms and planning regulations have exposed wind energy producers to greater market risks and stiffer competition for land use. In many cases, this puts citizen cooperatives at a disadvantage vis-a-vis large electricity companies and professional project developers, since the former are slower to act given their democratic decision-making processes and they dispose of less start capital. On the other hand, citizen cooperatives are adopting new strategies in response to these changed circumstances such as establishing joint interest groups, networks and businesses to sell electricity."

Pooling resources to increase influence

In Germany, Denmark and Belgium a number of citizen cooperatives have jointly founded companies that pool the resources of their members. In this way, they can reduce their dependence on state funding and survive in a difficult environment. "Citizen initiatives will remain an epiphenomenon of the energy transition if they do not succeed in transcending their local experience in order to form networks and coalitions at higher levels and articulate their interests to national and international strategies," explains lead author Thomas Bauwens from the University of Liège. And for Boris Gotchev, citizen participation remains vital to the success of the Energiewende. The involvement of citizens in concrete projects and decision-making processes is essential to achieving the desired expansion of renewables and also promotes greater societal acceptance for the transformation of the energy system.

Further information:

 Civic Participation in the Energiewende: What Germany Can Learn from Denmark
 Blog post by Boris Gotchev

Climate

Climate Change Could Lead to More High-Ozone Events in Central Europe



Berlin and other Central European cities may experience more high-ozone events in the future.

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Elevated concentrations of ground-level ozone damage vegetation and ecosystems, and are detrimental to public health. Now scientists have studied the effect of meteorological variables on ground-level ozone in Europe during the "ozone seasons" of spring and summer. Their findings were recently published in the journal "Environmental Research Letters".

"It has been established that there is a strong relationship between ground-level ozone and meteorology, however a better understanding about the effects of a changing climate on ozone air quality is needed. The topic is attracting interest not only in the scientific community but also in the general population because ground-level exposure has been associated with cardiovascular and respiratory problems, causing premature deaths," explained lead author Noelia Otero Felipe of the IASS.

Heatwaves likely to drive up ozone levels

Ground-level or tropospheric ozone is a secondary pollutant not emitted directly. It forms in the troposphere by catalytic photochemical reactions of nitrogen oxides with carbon monoxide, methane, and other volatile organic compounds. Significant sources of these ozone precursors are traffic and industry, but also plants and soil. Ozone belongs to the so-called short-lived climate-forcing pollutants (SLCPs), which have a relative short lifetime in the atmosphere, from a few days to a few decades. Moreover, ground-level ozone formation has been related to meteorological parameters, which implies that changes in meteorological conditions would lead to changes in ozone pollution episodes. In turn, these changes indirectly increase human

health risks associated with higher pollutant levels. The researchers attempted to identify the main drivers of high ozone values and to determine regional and seasonal variations of those drivers.

Influence of meteorological parameters

Using statistical modelling, their study assesses the influence on surface ozone of several local meteorological parameters, such as maximum temperature, relative humidity, solar radiation, and wind speed but also takes the influence of atmospheric circulation on a larger scale into account. To assess the spatial variability of observed effects, the researchers divided the continent into a grid of $100 \times 100 \text{ km}$ squares. They used meteorological data measured in these grid cells in the spring and summer seasons in the period from 1998 through to 2012. They then applied three different statistical techniques; namely, multiple linear regression, quantile regression and logistic regression, to assess the influence of the parameters on different ozone concentrations (mean values and extremes).

The results suggest that a warmer climate in some regions would adversely affect ozone levels and, consequently, air quality. Maximum temperature plays an important role in summertime in Central Europe, while it has a lesser effect in South Europe. "The link between temperature and ozone pollution has been known for some time already, but this is the first study to examine the way the strength of this link varies between different regions, so this is really a new insight," commented Tim Butler, co-author of the study and leader of the programme Air Quality in the Context of Global Change at the IASS. He stressed that existing laws and regulations are not sufficient to bring about a lasting reduction in ozone concentrations that would sufficiently protect the population from its harmful effects.

Further information:

■ Ground-Level Ozone -A Neglected Problem, v. Schneidemesser, E. (IASS), Kutzner, R. (IASS), Grass, A. (DUH), Saar, D. (DUH)

Imagining Climate Engineering Governance: Are Foresight and Scenarios Useful Tools?



Is Solar Radiation Management a sustainable approach to mitigating climate change?

© istock/Viorika

The idea of Solar Radiation Management (SRM) describes a set of hypothetical approaches that suggest that reflecting a small portion of incoming sunlight back into space can reduce climate warming and mitigate some of its impacts – for example, by creating a layer of reflective aerosols in the upper atmosphere or increasing the reflectivity of marine clouds. SRM is often subsumed under the broader term of "geoengineering" or "climate engineering," generally defined as deliberate and large-scale interventions in the climate system aimed at counteracting some of the impacts of climate change.

But, how might SRM be governed? This question has been central to early discussions. The IASS, together with the strategic planning consultancy Foresight Intelligence, recently completed the project Solar Radiation Management: Foresight for Governance (SRM4G), which sought to create and test a framework based on foresight methods for exploring the capacities of different SRM governance proposals without making policy recommendations. SRM4G used imaginative scenarios to place a focus on one particular set of assumptions embedded in SRM regulatory designs: the threats and opportunities emphasised as the most important for governance to navigate in the political landscape of the near term and the far future. IASS researchers have now released a Working Paper reviewing the discussions and findings of the workshops.

SRM does not exist as full-fledged technologies and deployment strategies, but as an early set of research activities; national governments have yet to take positions on its deployment or even the need for exploratory research. If SRM emerges into the complex landscape of issues, actors, and agendas in global politics, challenges may arise at every stage from innovation to implementation. Most of these challenges – ranging from the concern that mitigation efforts may

Further information:

■ Solar Radiation Management: Foresight for
Governance, Boettcher, M.
(IASS), Gabriel, J. (Foresight Intelligence), Low, S. (IASS)

suffer from the prospect of SRM, to impacts upon state and human security – have entwined societal, technical and environmental dimensions.

In SRM4G, researchers applied scenario construction methods to generate a set of four alternative futures set in 2030. The richly-detailed storylines and actor landscapes of each scenario exercised a different influence on the challenges associated with development of SRM technologies, ranging from an unstable, multi-polar world suffering unevenly from the impacts of climate change, to an international order in which renewable energy breakthroughs have rendered SRM obsolete. The scenarios then provided the context for the design of systems of governance with the capacity and legitimacy to respond to those challenges, and for the evaluation of the advantages and drawbacks of different options against a wide range of imaginary but plausible futures.

The scenarios, which are presented in this IASS Working Paper, provide material for future research and could be used to test existing governance proposals. Reflections from participants on the project's process and outcomes suggest that scenario building can be useful in considering the myriad of uncertainties associated with climate engineering governance and can advance future-oriented communication in the SRM research community.

Further information:

■ The project webpage contains a brief summary of SRM4G background, aims, and participants, and a list of seminal assessment reports as well as projects that apply foresight methods to climate engineering.

Participation

Citizen Participation in the Energy Transition: Researchers Present Findings



Researchers from the IASS and the Institute for Advanced Studies in the Humanities in Essen (KWI) have been working together since 2011 in the joint project Demoenergy to study the conditions that support successful participatory processes. This collaborative research project, which was funded by the Federal Ministry of Education and Research, concluded with a conference at the IASS on 15–16 February, where the researchers presented and discussed their findings with representatives from state ministries and agencies, the business sector, and civil society, together with process designers and moderators as well as researchers from a range of disciplines.

The energy transition as a proving ground for democracy

"The energy transition is one of the most important contemporary participation processes. A particular challenge in this context is, on the one hand, the desire of decision-makers to generate acceptance through participation in relation to specific projects – for the expansion of the grid, for example – whereas citizens, on the other hand, have a range of concerns in relation to the energy transition as a whole that they would like to discuss. This balancing act was scarcely researched prior to this," explained Patrizia Nanz, the former director of the transdisciplinary research area "Culture of Participation" at the KWI, and now director of the IASS. Nanz initiated the Demoenergy project together with KWI director Claus Leggewie and IASS founding director Klaus Töpfer.

The Demoenergy project explores citizen participation as a part of the energy transition.

© IASS/KWI/Sabine Söder, CoCreative Flow The trio believe that the energy transition is a challenge which Germany has to accomplish, and that citizens should have the opportunity to contribute to its success. "Germans still need to be convinced that the energy transition is a matter for democracy. Most people believe that it is a question of good planning. But difficult decisions require democratic solutions, and in that respect the energy transition is an illustrative proving ground for democracy," said Claus Leggewie.

Participatory processes made to fit

The project aimed not simply to investigate participatory processes but also to initiate and implement processes together with actors from the field. The researchers from KWI initiated, implemented, and accompanied two participatory processes along the Ostbayernring transmission route together with grid operator TenneT TSO. The project's findings are presented in ten propositions in a Working Paper published on the occasion of the conference. "Our hope is that citizen participation will be understood as more than just the application of different formats such as the World Café process and Future Search conferences", emphasised Ina Richter from the IASS. On the contrary, these formats are the staging grounds for processes that affect and engage with diverse actors. They influence the design of participatory processes, their trajectories, and the outcomes that they deliver. Every situation calls for the development of a process that is made to fit.

The role of scientists in these processes, argued IASS director Ortwin Renn in the concluding discussion, is to provide citizens with the systems knowledge required to better understand and assess the positions put forward by planning authorities and project developers. Most importantly, they must be empowered to challenge often-used arguments along the lines of: "We've tried that a hundred times before and it has never worked!" Latitude is not a given within these processes, but must be carved out by the participants.

Further information:

- For more information about the project, please visit: www.demoenergie.de.
- The website www.energiebeteiligt.de provides an overview of participation processes and enables users to compare them.

Society

How Can We Encourage Collective Behaviour Change Towards Sustainable Futures? Experts Develop New Approaches at the IASS



IASS scientific director Ortwin Renn welcomed the participants, who brought expertise in the natural sciences, psychology, sociology, education, philosophy, theology, and history to the workshop.

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The Knowledge, Learning, and Societal Change international research alliance (KLASICA.org), chaired by Ilan Chabay, Senior Advisor for Global Sustainability Research at the IASS, has launched an international research programme to explore collective behavioural change. The programme kicked off with a workshop at the IASS on 7–9 February 2016 to consider the concepts, methods and case studies that are essential for understanding collective behaviour change. The workshop was held within the IASS research programme Emerging Technologies and Social Transformations in the Anthropocene. It brought together experts from the natural sciences, psychology, sociology, art, education, philosophy, theology, and history – in total 35 external participants from a dozen countries and about 15 researchers from the IASS – to develop a portfolio of analytical, epistemological, and methodological approaches that will facilitate transformative societal change toward sustainable futures.

The workshop topics were framed by five short talks ranging in order from broadly historical to specific issues in research and societal practice. The discussions led the group to recognise the need for greater understanding of both the conditions that support or hinder changes in collective behaviour or practice.

Among the topics discussed was the need to change the predominant sustainability discourse, which emphasises environmental constraints and limits in order to motivate broader participation. John Robinson of the University of Toronto contrasted two ways of communication: persuasive communication and emergent dialogue. Persuasive communication aims to convey the "correct story" in ways that change individual or policy behaviour. Emergent dialogue focuses on opportu-

nities and allows participants to explore preferred outcomes, consequences of choices and strategies for change. "Persuasive communication is fine when we agree on societal objectives, but when the issues are deeply contested like the future of the city, emergent dialogue seems more appropriate. In areas of contestation we should not impose our views," Robinson argued.

Another major topic was the need to transcend disciplinary boundaries in order to achieve collective changes in behaviour. For this a sense of belonging is critical, stressed Ulli Vilsmaier of Leuphana University of Lüneburg: "How can we succeed in establishing a heterarchic relationship, or indeed a sense of unity among actors who come from different fields of society and have different roles and responsibilities in a transdisciplinary research process? While a common, overarching goal is essential for this, it is by no means sufficient." What is also needed are spaces and institutions that lie between established societal fields and thus enable belonging in diversity - spaces that are constituted from difference and have the capacity to overcome existing conditions and hegemonies, Vilsmaier said. This view is closely related to prior work published by J. David Tabara (who also attended the workshop) and Ilan Chabay on "Coupling Human Information and Knowledge Systems with social-ecological systems change: Reframing research, education, and policy for sustainability."

The workshop was intense and deeply engaging for the participants, as was clearly evident from the discussions. "The framing talks and intense discussions in the three days resulted in insightful and creative ideas that will shape our way forward with KLASICA and also established an energised and committed core group to expand our network for research and action on collective behaviour change for sustainable futures," Ilan Chabay said.

Further information:

■ To find out more about the project, visit our website: **www.klasica.org**.

"Science Thrives in Open-minded Environments": An Open Letter from the Directors of Research Institutes in Potsdam



Potsdam has hosted a number of world-renowned scientists throughout its history.

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"It is harder to crack a prejudice than an atom."

(Albert Einstein, 1879 - 1955)

Science thrives in open-minded environments – in places that foster our curiosity of the unknown and encourage a free and impartial exchange of ideas and people across nations, cultures, religions, and ethnicities. The closed society is the antithesis of science.

With science, the free spirit of the open society has found a home in Potsdam – a city which has hosted a number of world-renowned scientists throughout its history, among them Albert Einstein, who was forced to flee to the United States in 1933. In relative terms, no other city in Germany is home to more scientists than Potsdam. Many of the institutions based here employ researchers from diverse countries. With over 10 000 employees, the science sector is one of the leading sources of employment in the region. Around 25 000 students attend colleges and universities in Potsdam. Each year our city is visited by numerous researchers from around the world. And every day, researchers in Potsdam engage in joint research with colleagues based at institutes abroad to bring about a better future for people here in Germany and throughout the world.

To call into question the fundamental right to human dignity and its protection – as has occurred here in Potsdam in recent weeks in the context of the refugee crisis – is to attack the very spirit and character of this city. As the leaders of research institutes based in Potsdam, we reject all expressions of hatred, violence, and intolerance towards people on the basis of their origins, appearance, religion, or other grounds. There is no place in our country or in our city for hostility

towards foreigners and those who come to us seeking refuge. These attempts to create a climate of hate run counter to our values as Europeans, as Germans, and as citizens of Potsdam – and to our interests as a leading centre for science and business.

We are extremely proud of the many employees at our institutes who, on their own initiative, dedicate considerable effort to fostering a caring and tolerant society in which violence has no place – whether they do so by helping those in need or by standing up for the liberal values that underpin our society. They are role models to us all, and we call on Potsdam to maintain its tradition as a cosmopolitan and tolerant city – not simply for the sake of science, but for the sake of a ll those who live here and who come as guests to our city.

The initial signatories (in alphabetical order):

Prof. Oliver Günther, PhD, President, University of Potsdam
Prof. Dr. Reinhard Hüttl, Scientific Executive Director, HelmholtzCentre Potsdam – GFZ German Research Centre for Geosciences
Prof. Dr. Mark Lawrence, Managing Scientific Director, Institute for
Advanced Sustainability Studies, IASS

Prof. Dr. Karin Lochte, Director, Alfred-Wegener-Institute for polar and marine research, AWI

Prof. Dr. Hans-Joachim Schellnhuber, Director, Potsdam Institute for Climate Impact Research, PIK

Further information:

This letter has attracted
 33 signatories to date. A
 complete and current list of the
 signatories is available here.

SELECTED PUBLICATIONS

Selected publications by IASS researchers in peer-reviewed journals (1st quarter, 2016):

Baatz, C., Heyward, C., Stelzer, H. (2016): The Ethics of Engineering the Climate [Editorial]. – *Environmental Values, 25*, 1, pp. 1–5.

Link

Bauwens, T., Gotchev, B., Holstenkamp, L. (2016): What drives the development of community energy in Europe? The case of wind power cooperatives. – *Energy Research and Social Science, 13*, pp. 136–147.

Link

Brand, U. (2016): "Transformation" as New Critical Orthodoxy. The Strategic Use of the Term "Transformation" Does Not Prevent Multiple Crisis. – *GAIA – Ecological Perspectives for Science and Society, 25,* 1, pp. 23 – 27.

Link

Bruhn, T., Naims, H., Olfe-Kräutlein, B. (2016): Separating the debate on CO_2 utilisation from carbon capture and storage. – *Environmental Science and Policy, 60*, pp. 38–43.

Link

Butt, E. W., Rap, A., Schmidt, A., Scott, C. E., Pringle, K. J., Reddington, C. L., Richards, N. A. D., Woodhouse, M. T., Ramirez-Villegas, J., Yang, H., Vakkari, V., Stone, E. A., Rupakheti, M., Praveen, P.S., van Zyl, P.G., Beukes, J.P., Josipovic, M., Mitchell, E. J. S., Sallu, S. M., Forster, P. M., Spracklen, D. V. (2016): The impact of residential combustion emissions on atmospheric aerosol, human health, and climate. – *Atmospheric Chemistry and Physics*, *16*, pp. 873–905.

Link

Churkina, G. (2016): The Role of Urbanization in the Global Carbon Cycle. – *Frontiers in Ecology and Evolution, 3*, 144.

Link

Huanga, C.; Wub, T., Renn, O.: A Risk Radar Driven by Internet of Intelligences Serving for Emergency Management in Community. – *Environmental Research*, 3 (2016), pp. 126–135

Link

Lourens, A. S., Butler, T. M., Beukes, J. P., van Zyl, P. G., Fourie, G. D., Lawrence, M. G. (2016): Investigating atmospheric photochemistry in the Johannesburg-Pretoria megacity using a box model. – *South African Journal of Science, Volume 112*, 1/2, pp. 103–113.

Link

McCormack, C. G., Born, W., Irvine, P. J., Achterberg, E. P., Amano, T., Ardron, J. A., Foster, P. N., Gattuso, J.-P., Hawkins, S. J., Hendy, E., Kissling, W. D., Lluch-Cota, S. E., Murphy, E. J., Ostle, N., Owens, N. J., Perry, R. I., Pörtner, H. O., Scholes, R. J., Schurr, F. M., Schweiger, O., Settele, J., Smith, R. K., Smith, S., Thompson, J., Tittensor, D. P., van Kleunen, M., Vivian, C., Vohland, K., Warren, R., Watkinson, A. R., Widdicombe, S., Williamson, P., Woods, E., Blackstock, J. J., Sutherland, W. J. (2016): Key impacts of climate engineering on biodiversity and ecosystems, with priorities for future research. – *Journal of Integrative Environmental Sciences*.

Link

Otero Felipe, N., Sillmann, J., Schnell, J. L., Rust, H. W., Butler, T. M. (2016): Synoptic and meteorological drivers of extreme ozone concentrations over Europe. – *Environmental Research Letters, 11,* 2, 024005.

Link

Pan, S.-Y., Lorente Lafuente, A. M., Chiang, P.-C. (2016): Engineering, environmental and economic performance evaluation of high-gravity carbonation process for carbon capture and utilization. – *Applied Energy, 170*, pp. 269–277.

Link

Renn, O. (2016): Paris – und was nun? Auf dem Weg zu verbindlichen Klimaschutzzielen [Editorial]. – *GAIA – Ecological Perspectives for Science and Society, 25,* 1, p. 1.

Link

Renn, O.: Systemic Risks: The New Kid on the Block. - *Environment: Science and Policy for Sustainable Development, 58:2 (2016)*, pp. 26 - 36.

Link

Sarkar, C., Sinha, V., Kumar, V., Rupakheti, M., Panday, A., Mahata, K., Rupakheti, D., Kathayat, B., Lawrence, M. G. (2016): Overview of VOC emissions and chemistry from PTR-TOF-MS measurements during the SusKat-ABC campaign: high acetaldehyde, isoprene and isocyanic acid in wintertime air of the Kathmandu Valley. – *Atmospheric Chemistry and Physics, 16*, pp. 3979 – 4003.

Link

von Schneidemesser, E., Coates, J., Denier van der Gon, H., Visschedijk, A., Butler, T. M. (2016): Variation of the NMVOC speciation in the solvent sector and the sensitivity of modelled tropospheric ozone.— *Atmospheric Environment, 135*, p. 59–72.

Link

Schroeter, R., Scheel, O., Renn, O., Schweizer, P.-J. (2016): Testing the value of public participation in Germany: Theory, operationalization and a case study on the evaluation of participation. – *Energy Research and Social Science, 13*, (March 2016), pp. 116–125.

Link

Stelzer, H., Schuppert, F. (2016): How Much Risk Ought We to Take? Exploring the Possibilities of Risk-Sensitive Consequentialism in the Context of Climate Engineering. – *Environmental Values*, 25, 1, pp. 69–90.

Link

Stiem, L., Krause, T. (2016): Exploring the impact of social norms and perceptions on women's participation in customary forest and land governance in the Democratic Republic of Congo – implications for REDD+. – *International Forestry Review, 18,* 1, pp. 110–122.

Link

Tiwari, S., Grote, R., Churkina, G., Butler, T. M. (2016): Ozone damage, detoxification and the role of isoprenoids – new impetus for integrated models. – *Functional Plant Biology, 43*, 4, pp. 324–336.

Link

Todd, M. C., Cavazos Guerra, C. (2016): Dust aerosol emission over the Sahara during summertime from Cloud-Aerosol Lidar with Orthogonal Polarization (CALIOP) observations. – *Atmospheric Environment, 128*, pp. 147–157.

Link

Zanella, M. A., Milhorance, C. (2016): Cerrado meets savannah, family farmers meet peasants: The political economy of Brazil's agricultural cooperation with Mozambique. – *Food Policy, 58*, pp. 70–81.

Link

NEW PROJECTS AND COOPERATIONS

Creating a Sustainable Energy Transition: IASS to Lead Kopernikus Project

The Institute for Advanced Sustainability Studies (IASS) has won the tender for one of four Kopernikus research projects in the largest research initiative for the energy transition launched by the Federal Ministry of Education and Research (BMBF) to date. The Institute will lead the ENavi project in the thematic field of "System Integration", which aims to ensure that the energy transition is sustainable in its social, ecological and economic dimensions. Central to achieving this goal will be ensuring social participation in decision-making around the transformation of our energy systems and, for example, the development of new infrastructure, the financial participation of broad sections of society in new business models for the energy sector, an equitable distribution of burdens and the cushioning of social impacts. Dialogue with representatives from the economy, politics, and civil society will form a central pillar of this project. IASS Director Ortwin Renn will lead the research consortium, which brings together 64 partner organisations. The project, for which up to € 100 million in funding has been earmarked over a period of ten years, will explore the systemic links between technology, the reliable and cost-efficient supply of energy, new business models, socially responsible systems design, and the energy-relevant actions of bulk and small-scale consumers.

Among the project's central tasks is the development of a navigational instrument that will combine scenario development and simulation capacities with analyses and evaluation processes supported by expert inputs. ENavi will also establish knowledge interfaces with the three other Kopernikus projects, which will study the development of energy networks, the storage of surplus energy from renewable sources through energy carrier conversion, and the adaptation of industrial processes to a fluctuating energy supply.

Air Quality and Climate Change: Nepalese Academy and IASS Sign Agreement for Scientific Cooperation

The Nepal Academy of Science and Technology (NAST) and the IASS are seeking to strengthen their cooperation in the area of sustainability research. In Kathmandu, NAST Vice Chancellor Jiba Raj Pokharel and IASS Director Mark Lawrence signed a memorandum of understanding for scientific cooperation. The memorandum will pave the way for joint research activities in Nepal. The IASS will provide access to personnel, resources, scientific expertise, and technical assistance as well as to instruments and atmospheric observations. In turn, the

Contact:

■ Ortwin Renn

Contact:

■ Birgit Lode

Nepalese Academy will make its resources in the region available, including its contacts to a broad range of academic and state bodies. Air pollution has become increasingly severe in Nepal over the last decades, and the country is already heavily impacted by climate change. The IASS has been active in Nepal since 2012 with the research projects SusKat – A Sustainable Atmosphere for the Kathmandu Valley and – since 2015 –ELIAS – Environmental Law and Institutions for Air, Climate, and Sustainability. Both projects include special consideration of the Kathmandu Valley, where brick kilns, vehicle traffic, and open burning are major sources of air pollution.

Further information:

- Research project:

 A Sustainable Atmosphere
 for the Kathmandu Valley
- Research project:
 Environmental Law
 and Institutions for Air,
 Climate, and Sustainability

IASS PEOPLE

Dr. Ulrich Brand will be working with the Cross-cutting Unit for Transdisciplinarity and Transformation as a visiting scientist from March to July 2016. Brand has researched and lectured as a Professor of International Politics at the University of Vienna since 2007. His research interests include globalisation and its governance, the dynamics of non-sustainability and socio-ecological transformation, international environmental and resource policy, and neo-extractivism in Latin America. He is the head of two Vienna-based interand transdisciplinary research projects concerned with socioecological issues. During his time here, Brand will be working on

a book on the "imperial mode of living" and the relationship between socio-ecological transformation, transdisciplinarity and the debate surrounding the Anthropocene.

Prof. Dr. Julia Leyda joined the IASS as a Senior Fellow in April 2016. She is also researching at the John F. Kennedy Institute attached to Freie Universität Berlin. Her research focus spans the fields of contemporary film, media studies, and American studies. She is the author of "American Mobilities: Class, Race, and Gender in US Culture" (Transcript, 2016) and has published articles in journals including American Quarterly, Compar-

ative American Studies, Cinema Journal, Jump Cut, and Television and New Media. Leyda has joined the Economics and Culture programme at the IASS and is working on her project "Cultural Affordances of Cli-Fi: 21st-Century Scenarios of Climate Futures", which examines the role of literary and screen media in shaping the public's understanding of anthropogenic climate change.

Craig Morris will be working at the IASS from April to September 2016 as a Fellow in the Transformation of Energy Systems programme. During his time at the IASS, he will be developing an online learning

module (MOOC) on the energy transition and working on a book on the financing of renewable energy. The American journalist holds a Master's in German Studies from the University of Texas, Austin. He has lived in Germany since 1992, and has worked as an editor and author since 2002. In 2014 Morris was the recipient of the Energy Journalism Award of the International Association of Energy Economists (IAEE).

Max Höfer joined the Economics and Culture programme as a Senior Fellow in March 2016. At the IASS he will be working on a study on the influence of religious narratives on economics and ecology. An economist and political scientist, Höfer's career includes stations with the Konrad Adenauer Stiftung and publishers Gruner & Jahr, where he was an assistant to the board. Höfer also led the Berlin office of German business magazine Capital and is a former managing director of the Initiative New Social Market Economy (INSM). Born in Stuttgart in 1959, Höfer manages the strategic consultancy höfermedia.

Dr. Ting Lu joined the IASS as a Research Fellow on 1 April.
Dr. Lu holds a position as Associate Professor at the Institute of World Economics and Politics, Chinese Academy of Social Sciences. Her research focuses on the macroeconomic implications of financial bubbles and crashes, and the theory and

practice of managing financial stability. At IASS, she teamed up with the Economics and Culture programme to explore the endogenous stability of the international monetary system. Her work will be part of our ongoing research activities concerning the transition towards an economically, ecologically, and socially sustainable financial system.

Prof. Dr. Patrizia Nanz – see our article on the new IASS Board of Directors **here**.

Thiago Pinto Barbosa joined the Economics and Culture programme at the IASS in March 2016 as a Research Associate and works at the interface of art and science. Born in Brazil, the anthropologist, sociologist and political scientist has worked at various research institutes in Germany, Brazil and Mozambique, including the Potsdam Institute for Climate Impact Research and the João Pinheiro Foundation in Pampulha, Brazil. Barbosa is a former Heinrich Böll Foundation Scholar and his research interests include political ecology, the history and sociology of knowledge, and postcolonial theory. He is currently completing a doctoral degree at the Institute of Social and Cultural Anthropology at Freie Universität Berlin.

François Pougel joined the IASS in March 2016 to work on the sustainability impacts of Industry 4.0. He studied

environmental earth sciences at the University of Toulouse. and geopolitics and international relations at the Institute for Political Studies of Toulouse. Before joining the IASS, he worked in Corporate Environmental Affairs for the Airbus Group. His main activities there included working with trade associations, coordinating cross-divisional sustainability projects, and more recently, industrial sustainability strategy and public funding for projects with sustainability benefits.

Prof. Dr. Ortwin Renn - see our article on the new IASS Board of Directors **here**.

Prof. Dr. Stephan Rist is an Associate Professor for Human Geography at the Institute of Geography of the University of Bern and the head of the thematic cluster Sustainability Governance of Land and Natural Resources at the Centre for Development and Environment (CDE). After studying agricultural sciences at the ETH in Zurich, he gained his PhD in rural sociology at the Technical University in Munich (Germany). His primary areas of research are the theory and practice of transdisciplinary knowledge co-production, deliberative resource governance, critical sustainability assessments, social movements and environmental justice.

Dr. Ashish Singh joined the IASS in January 2016 as a Research Fellow in the SusKat project, part of the Air Quality in the Context of Global Change program. He completed his doctor of philosophy in chemical engineering at the University of Iowa, USA. Originally from Nepal, he has also worked as a researcher in Nepal and the United States. His research interests include transformation of atmospheric aerosol, secondary aerosol formation and air quality, and policy perspectives on emergent and incidental air quality challenges in the developing world.

Cicilia Wangari Githaiga is an environmental lawyer. She is also an M.A. environmental policy student at the University of Nairobi and is now an Alexander von Humboldt Climate Protection Fellow in the ETST team at the IASS. Her research project within the ETST programme is on policy and legal interventions

for carbon capture and use in the extractive industry in Kenya with a focus on legislation and policy for climate change adaptation and mitigation.

Yvonne Waweru joined the IASS in February 2016 as a Project Scientist. She is a lawyer and an advocate of the High Court of Kenya and holds a postgraduate diploma on Environmental Management for Developing and Emerging Countries from the Centre for International Postgraduate Studies on Environmental Management (CIPSEM), TU Dresden, Germany. Prior to joining IASS, she worked as an Associate Programme Officer at the Secretariat for the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment for the Western Indian Ocean at UNEP in Nairobi, Kenya. As a member of the Ocean Governance group, she will be working on the project "Partnership for Regional Ocean Governance: Supporting SDG implementation for Ocean and Coasts".

Laura Weiand is an ecologist working with the programme for Air Quality in the Context of Global Change at the IASS. Weiand will be primarily working in the projects SusKat (A Sustainable Atmosphere for the Kathmandu Valley) and ClimPol (Air Pollution and Climate Change - Research Needs and Pathways to Policy Implementation). She will be contributing to the development of an outreach module built around the animated film "Outlaws in Air City", which was created by the IASS to raise awareness of air pollution. Before joining the IASS, Weiand led a social-ecological project in West Papua and developed a science-based programme aimed at heightening public awareness around marine environmental issues.

JOB ADVERTISEMENTS

Scientific positions:

Research Associate (m/f) for the research programme "Air Quality in the Context of Global Change"

This position is initially a fixed-term contract for 2.5 years. Deadline for applications: 8 May 2016

Non-scientific positions:

Deputy Academic Officer for Budget Administration & Controlling

This position is initially a 2-year fixed-term contract. Deadline for applications: 2 May 2016

■ To the job advertisement

■ To the job advertisement

UPCOMING EVENTS

April 2016

22 April 2016

The Global Soil Forum (IASS) will kick off the "Golden Grounds" social media campaign for Earth Day 2016.
Further information:

■ Link

28-29 April 2016

Experts, Development and Sustainability Organised by: IASS, Freie Universität Berlin Venue: IASS, Potsdam (By invitation only)

Conference: Futures Past:

May 2016

02-04 May 2016

Conference: Jump-starting the SDGs in Germany
Organised by: IASS, German
Federal Ministry of Food and
Agriculture (BMEL)
Venue: Andel's Hotel, Landsberger
Allee 106, 10369 Berlin
For more information on the
conference and registrations,
please see:

■ Link

To the IASS Calendar of Events

12-13 May 2016

Workshop: 2016 Potsdam Ocean Governance Workshop - Sustainable Development Goals for the Ocean: Turning Commitment into Action Organised by: IASS in cooperation with IDDRI, UNEP, BMZ, GIZ and "The Future Ocean" Cluster of Excellence (Kiel) Venue: IASS, Potsdam (By invitation only)

21 May 2016

Public event: **4. Science Day** in Potsdam

The IASS will be attending the Science Day with a stand and three fun activities that invite participants to explore the topics of soils and air pollution and to assess their personal carbon footprint.

Organised by: proWissen

Potsdam e.V.

Venue: Filmuniversität Babelsberg

Konrad Wolf, Potsdam Time: 1.00 p.m. - 8.00 p.m. For more information, see:

Link

31 May and 2 June 2016

Youth Academies of the 2016 German Sustainability Activity Days

Organised by: IASS

Venue: Wissenschaftsetage im Bildungsforum Potsdam



Join the discussion: how sustainable are the sustainable development goals? How can we meet the increasing demand for water and energy across the globe? What is the City of Potsdam doing to support sustainable urban development? Read the latest blogs penned by IASS researchers!



Follow us on Twitter!

We keep you informed on a daily basis and tweet live from important events.

CONTACT AND IMPRINT

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