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# The Earth System Governance Project - A Snapshot

The Earth System Governance Project is an interdisciplinary academic research network that connects and mobilizes social science scholars globally. The project aims to advance research at the interface between global environmental change and governance, across local and global scales. The network fosters community collaboration across disciplines, geographies and career stages. The highly interdisciplinary research community of over 450 scholars spans disciplines such as international relations, political science, human geography, urban studies, development studies, and sustainability science, among others.

#### We aim to:

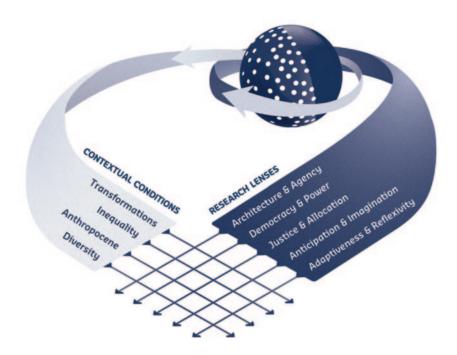
- Expand the global mobilization of earth system governance researchers
- Stimulate and facilitate research collaborations
- Inform and advise at the science-policy interface

#### **Background**

Overall, the Earth System Governance Project advances ground-breaking interdisciplinary scholarship spanning analytical, critical and normative orientations. Members of the Earth System Governance community – ranging across a wide range of sectors and scales, disciplines, career stages, and geographical regions – stimulate and lead international debates on environmental politics, advance insights into governance opportunities and solutions, and push the frontiers of our understanding of earth system transformations in the social sciences.

The Earth System Governance Project is managed and administered through an International Project Office, currently hosted by the Copernicus Institute of Sustainable Development at the Faculty of Geosciences, Utrecht University, The Netherlands (2018-2023).

The Copernicus Institute of Sustainable Development is the scientific institute for sustainability research and teaching at Utrecht University. Through a wide array of activities, the institute's ambition is to make a difference – in science and education, and in society at large – in the exploration of a sustainable world. The Earth System Governance project is grateful for the support of the institute as our funding body and host of the International Project Office.



Research framework of the Earth System Governance Project (2018-2028)

#### **Research Framework**

The Earth System Governance Project's research agenda is driven by its 2018-2028 Science and Implementation Plan. This plan outlines the conceptual rationale, research agenda, and implementation mechanisms for the Earth System Governance Project. It revolves around a shared framework for conceptualizing and organizing Earth System Governance research. The framework articulates five Research Lenses which structure the activities of the Earth System Governance research community.

Transversally, four Contextual Conditions characterize core contemporary challenges facing Earth System Governance: Transformations, Inequality, Anthropocene, and Diversity. This research agenda helps to shape shared conversation among diverse perspectives. It also therefore serves as a basis for organizing and structuring the annual conference panels.

## Scientific Steering Committee



Dr. Steffen Bauer German Development Institute, Germany



Prof. Sarah Burch
University of Waterloo,
Canada



Prof. Aarti Gupta
Wageningen University,
The Netherlands



Prof. Cristina Yumie Aoki Inoue University of Brasilia, Brazil



Prof. Atsushi Ishii Tohoku University, Japan



Dr. Agni Kalfagianni Utrecht University, The Netherlands



Prof. Louis Kotzé North-West University, South Africa



Prof. James
Meadowcroft
Carleton University, Canada



Prof. Chukwumerije Okereke Alex-Ekwueme Federal University, Nigeria



Dr. James Patterson
Utrecht University,
The Netherlands



Dr. Jonathan Pickering University of Canberra, Australia

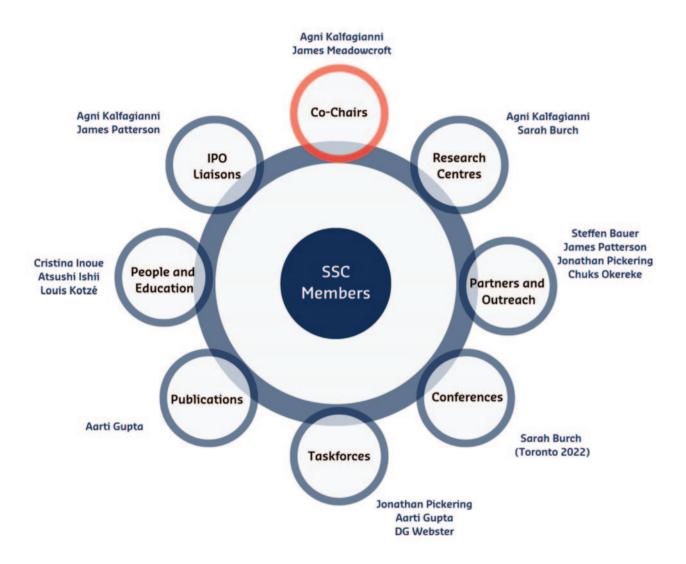


Prof. D.G. Webster

Dartmouth University, USA

#### Scientific Steering Committee

The Earth System Governance Project is overall steered by a Scientific Steering Committee comprised of 12 scholars spanning diverse disciplines and geographical regions. The role of the Scientific Steering Committee is to guide the implementation of the Earth System Governance Science and Implementation Plan, and ensure the continuation and thriving of the Earth System Governance network. Meetings take place quarterly spanning various locations across the world. The work of the Scientific Steering Committee is executed primarily through portfolios.



The work of the Scientific Steering Committee is executed primarily through portfolios.

#### Opening word from the Scientific Steering Committee

The Earth System Governance Project has achieved a great deal during 2021. Some highlights include: holding a successful hybrid conference in Bratislava; the establishment of a new Research Center in Stockholm; the creation of four new Taskforces and the continuation of existing ones; the launch of the Early Career Committee and Early Career Dialogues workshop; five highly attended webinars with distinguished scholars from across the globe; steady growth in network membership among Research Fellows and Senior Research Fellows; maturation of the Earth System Governance Journal; and several new releases in the Cambridge Elements series on Earth System Governance.

Importantly, the Bratislava Conference chaired by Professor Tatiana Kluvánková of the Slovak Academy of Sciences and Slovak University of Technology in September 2021, brought together the Earth System Governance community in a timely and important way. The theme of the conference – *Earth system governance in turbulent times:* prospects for political and behavioral responses – generated many conversations among Earth System Governance scholars who had the opportunity to engage in both virtual and physical forms. The keynote speaker, Professor Karen O'Brien highlighted the importance of relationships, and how we as individuals relate and connect to other human and non-human beings in an entangled world. This relationality aspect reverberated in multiple fora through the entire conference.

2021 also marked changes in the composition of the Scientific Steering Committee. We welcomed four new members: Professor Chukwumerije Okereke of Alex Ekwueme Federal University, Ebony State, Nigeria; Dr. Steffen Bauer of the German Development Institute, Germany; Professor Louis Kotzé of North-West University, South Africa; and Professor D.G. Webster of Dartmouth University, USA.

We said goodbye to three dear colleagues who will remain connected to the Earth System Governance Project as Lead Faculty members: Dr. Åsa Persson of the Stockholm Environment Institute, Sweden; Professor Lorraine Elliot of the Australian National University, Australia; and Professor David Mungai of the Wangari Maathai Institute for Peace and Environmental Studies, Kenya.

After three years of dedicated service, Dr. James Patterson (Utrecht University, the Netherlands) stepped down as Co-chair of the Scientific Steering Committee. His place has been taken by Professor James Meadowcroft (Carleton University, Canada) who joins Dr. Agni Kalfagianni (Utrecht University) in this role.

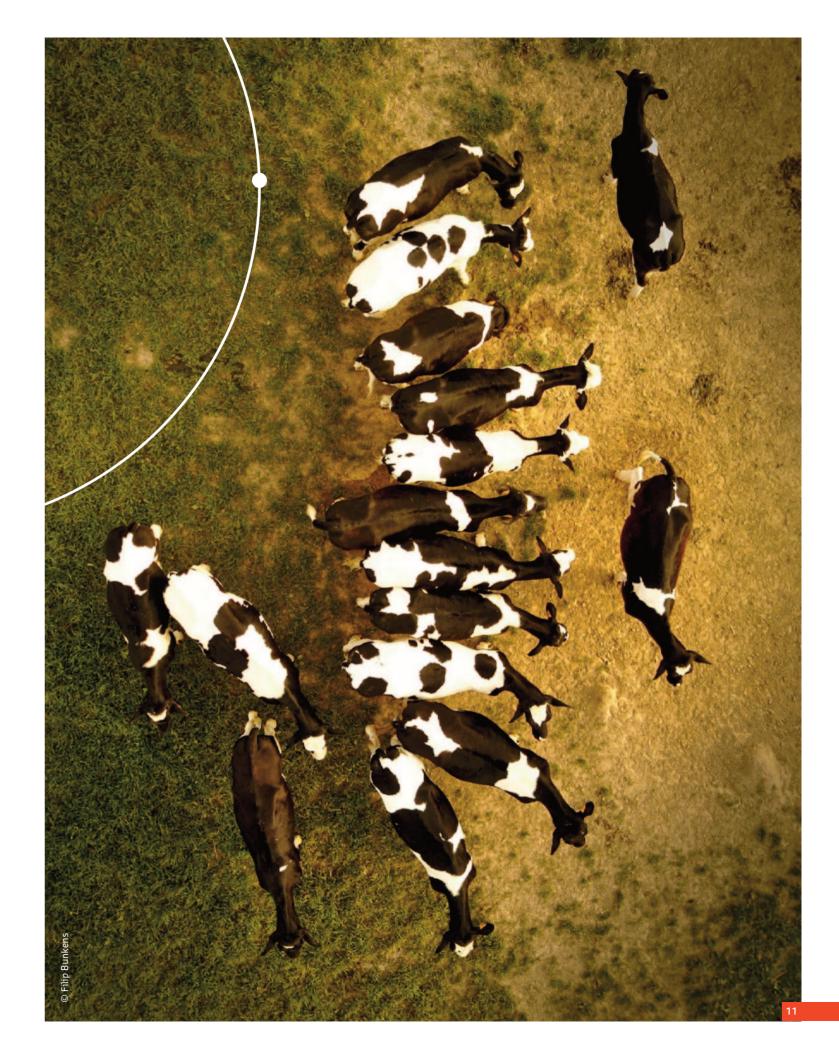
The COVID-19 pandemic continued to impact our work and wellbeing throughout 2021. Currently, more countries are easing restrictions as the pressure on healthcare systems is lessening, although unevenly globally. We understand that each person experiences this transition differently depending on their personal and contextual circumstances and we appreciate that it may take a long time before we adjust to the new circumstances.

The current geopolitical turmoil also reminds us how abrupt and violent change can be. Wars all over the world shatter human and non-human lives, livelihoods, and nature. But two international conferences that took place in 2021, the UN Biodiversity Conference (CBD COP15) and the UN Climate Change Conference (COP26), and multiple actions by state and non-state actors carry on the momentum to address our current predicament. As the fiftieth anniversary since the United Nations Conference on Human Environment in Stockholm is approaching, it is timely to reflect on governance successes and failures. Sustainability transitions and transformations that are peaceful and just, require our collective imagination, cooperation, and persistence. The Earth System Governance project has an important role to play in that respect providing the space for creative collaborative work, dialogue, and friendship.

In this light, we are very much looking forward to the 2022 Toronto conference on Earth System Governance to be held in October. The theme of this conference is Governing accelerated transitions: justice, creativity & power in a transforming world. This event is chaired jointly by Professors Matthew Hoffmann and Steven Bernstein both from the University of Toronto, and Professor Sarah Burch from the University of Waterloo. This is shaping up to be a big event with an unprecedented number of accepted abstracts. It will be an exciting opportunity to meet once again in person. We are very much looking forward to it!

We wish the entire Earth System Governance community well, and hope to interact again in person in the near future.

Scientific Steering Committee of the Earth System Governance Project, April 2022





# **Update from the International Project Office**

Following a tumultuous earlier year, the Earth System Governance community could re-bound in 2021 and found firm footing in the virtual realm, which enabled us to meet and mobilize in several novel ways.

In particular, new and important taskforces and working groups were formed. Some addressing the larger systemic challenges which have always underpinned our work, such as the Taskforce on Climate Governance or the Taskforce on the Governance of Nature and Biodiversity. Others were directed toward special focus areas or geographical areas (the Asia-Pacific Working Group), the effectiveness of steering through goals (Taskforce on the Sustainable Development Goals) or how to structurally accumulate knowledge (the Taskforce on Knowledge Cumulation).

For us at the International Project Office, we greatly enjoyed meeting so many new faces in the Early Career Dialogues and across the ESG Speakers Series. We also thoroughly enjoyed the hospitality of our colleagues in the Bratislava organizing team, whose determination and professionalism ensured the successful hosting of a particularly challenging conference.

The many projects, meetings, collaborations and events initiated by the Earth System Governance community are a testament to the dedication of everyone involved in this network. From the perspective of the International Project Office, we are continuously impressed by the breadth and depth of knowledge of all researchers involved, and more importantly, the passion for collaborating on solving planetary challenges at local to global scales.

As Managing Director, I would be amiss to not recognize the stellar work of my colleagues. Jane Butler, who has brought a great deal of energy in her first year, has grown the ESG communication channels and given ESG a brand face-lift. Lisa Bettoni, who ensures the machinery keeps ticking with heavy-lifting when it comes to coordination, event management and administrative affairs. Selma Polte, who as student assistant built a publication database (forthcoming) and helped to coordinate the Bratislava programme.

The International Project Office is generously hosted by the Copernicus Institute of Sustainable Development, Faculty of Geosciences, Utrecht University, the Netherlands. We are grateful for the ongoing support and collegiality offered by this world-leading research institution.



Gustav Thungren *Managing Director* 



Jane Butler
Science and Communication
Officer



Lisa Bettoni Network Management and Administrative Officer

#### The year in numbers

In 2021, the ESG network grew with 53 Research Fellows, plus 7 new Senior Research Fellows and 3 new Lead Faculty Members, or about 13% in total. This puts the total to 464 Fellows. This number means that we are seeing higher growth and participation than before the pandemic.



#### COMMUNITY GROWTH

464 Fellows

53 New Research Fellows from 26 countries

New Senior Research Fellows

3 New Lead Faculty



#### NEWSLETTER

1696 Total subscribers

306 Growth in subscribers



#### **TWITTER**

**1303** Followers growth (457 in 2020)

718,9k Impressions (289.9k in 2020)

#### **ESG Speaker Series**

The Earth System Governance Project, with coordinating support from the International Project Office hosted five editions of the ESG Speaker Series in 2021. The aim of the ESG Speaker Series is to provide a platform to explore, discuss and engage with contemporary debates emerging from scholars affiliated with the Earth System Governance Project. It serves to provide a platform for the ongoing research discussions and output scholars outside of the annual conference. Fellows of the network propose the topics and lead the dialogue of this series. The events attracted over 800 registrations between the various editions.

#### ESG SPEAKER SERIES: EARTH SYSTEM LAW AS A LEGAL PARADIGM FOR THE ANTHROPOCENE

The first ESG online speaker series took place on 4th February 2021 and was hosted by the Taskforce on Earth System Law. The webinar included an introduction to the concept of Earth System Law by Prof. Louis Kotzé and Dr. Rakhyun E. Kim. It then hosted an invited critique of the proposed paradigm according to its analytical, normative and transformative dimensions, by Laura Mai, Dr. Marie Petersmann and Emily Webster.





#### IT'S ABOUT TIME. TEMPORALITY, TENSIONS, AND EARTH SYSTEM GOVERNANCE OF THE FUTURE

This ESG Speaker Series, held in cooperation with the Urban Futures Studio at Utrecht University, examined how the notion of time is used, shapes and constructs environmental politics from multiple social science perspectives. It featured Dr. Jeroen Oomen of Utrecht University, Dr. Manjana Milkoreit of the University of Oslo, and Prof. Victor Galaz from Stockholm Resilience Centre.



#### ACHIEVING THE SDGS IN TIMES OF COVID-19

This event featured a roundtable of senior experts who discussed the challenges and opportunities related to the achievement of the SDGs in times of Covid-19. The panel featured Prof. Joseph Alcamo, Director of the Sussex Sustainability Research Programme, University of Sussex. Prof. Frank Biermann of Utrecht University, Dr. Åsa Persson from the Stockholm Environment Institute, as well as Andrea Ordóñez Llanos, the Director of the NGO, Southern Voice. It was moderated by Dr. Thomas Hickmann and Dr. Carole-Anne Sénit from Utrecht University.

# ALTERNATIVE ACTIONS? CLIMATE ACTIVISM AND EARTH SYSTEM GOVERNANCE

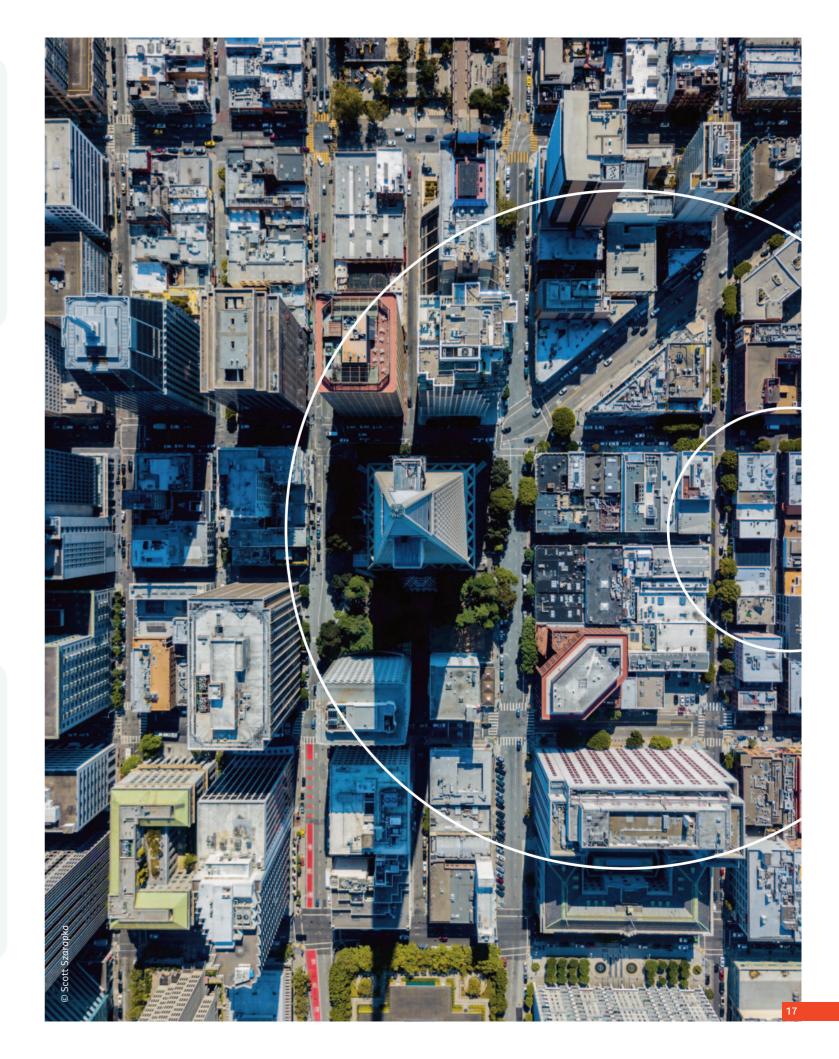
This interactive webinar on Climate Activism looked to understand and discuss what is unique about recent waves of climate mobilization. It delt with the both activism's engagement with, and opposition to, formal global sustainability governance institutions. Climate change was used as a case study while opening the discussion to other horizons of activism. The speakers included Dr. Amandine Orsini from Université Saint-Louis – Bruxelles, Dr. Jennifer Allan from Cardiff University and Dr. Joost de Moor from Leiden University.





# CLIMATE CHANGE ADAPTATION AND MITIGATION POLICY: FROM GLASGOW TO THE ASIA-PACIFIC

In the final ESG Speaker Series of the year, the network turned our attention to the discussions, outcomes, and implications of the COP26 climate change conference in Glasgow. This webinar was based on the perspective of the Asia-Pacific Region. Organized by Dr. Annisa Triyanti of the Asia-Pacific Working Group, speakers included Dr. Hong Quan Nguyen from Vietnam National University, Dr. Erwin Nugraha from University of Twente, Dr. Mahesti Okitsari from the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) in Japan, as well as Haomiao Du from Utrecht University.





#### 2021 Mentoring Initiative

The first ever ESG Mentoring Initiative was held as a pilot project across the year, with a total of 13 Mentors and 36 Mentees. This is a one-year programme designed to support and guide early career ESG Research Fellows as Mentees, to hopefully assist in advancing their career trajectories. Mentors involved are distinguished scholars, invited from the ESG Lead Faculty and Senior Research Fellows, who share experiences and provide professional guidance for a small group of 2-4 Research Fellow Mentees each. This initiative presented an opportunity to strengthen the ESG network by contributing to the development of future leaders in our field and bringing us closer together as a community. Given the success of the initiative, it has been decided to continue into 2022 and beyond.

# **Network and People**

The Earth System Governance network seeks to foster collaboration across disciplines, geographies and career stages. 2021 saw efforts to increase outreach in order to grow our network, as well as diversify membership and academic and epistemological perspectives. 53 New Research Fellows joined the project from 26 countries as well as 7 New Senior Research Fellows. There was great bottom up energy from the community with the development of four new taskforces and one new working group, by various conveners.

#### **Lead Faculty**

Three distinguished scholars were invited to join the Earth System Governance Lead Faculty. The Earth System Governance Lead Faculty is a small group of scientists of the highest international reputation who take (shared) responsibility for the development of research on particular analytical problems or cross-cutting themes We welcome Prof. Susan Park (Sydney Environmental Institute), Prof. Cristina Inoue (Radboud University) and Prof. Maarten Hajer (Utrecht University).



Prof. Susan Park



Prof. Cristina Inoue



Prof. Maarten Hajer

### **ORAN YOUNG PRIZE**

The Oran R. Young Prize awarded by the Earth System Governance Project seeks to reward and encourage cutting-edge research on earth system governance by early-career scholars who could become the next generation of leading scholars in the field of environmental governance research – a field shaped and significantly influenced by the pioneering work of Prof. Oran R. Young.

The Oran R. Young Prize for the best early-career paper in 2021 was awarded to Dr. Jasper Montana, at the Closing Plenary of the 2021 Bratislava Conference.

Dr. Jasper Montana is a Research Fellow at the School of Geography and the Environment at the University of Oxford. His paper was titled "Architectures of responsibility: Understanding obligations for biodiversity in the polycentric governance of the UK Overseas Territories." The paper was selected by the prize committee based on academic quality and novelty, as well as relevance to the Earth System Governance Research framework.

Thank you to the 2021 Prize Committee: Frank Biermann, Lorraine Elliott, Christopher Gordon, Peter Haas, Rakhyun E. Kim (Prize Committee Chair) Tatiana Kluvankova, Kate O'Neill and Susan Park.



## #ESG2021

Winner of the Oran R. Young Prize

**Dr. Jasper Montana** School of Geography and the Environment, University of Oxford

#### Meet our new Early Career Committee

Formed in December 2021, the Early Career Committee will meet quarterly, providing insights to the international project office on the needs of early career researchers and will set up various initiatives in communication and education.



Dr. Timothy Adivilah Balag'kutu

Institute for Natural Resources and Sustainable Development, Ghana
What kind of activities or conversation would you like to see more of among
early career researchers in our field?

First and in general, I think it would be great for early career researchers to be free to not sound "expert" and "polished" but have a bit of fun, casual and honest conversation about general research, and their own work. Relax – a bit! It would be great, following that, for early careers researchers be comfortable with reviewing each other's work. By that, early career researchers can utilize the space/opportunity to write STUFF – and make mistakes to learn from. We should try to collaborate on publications of any kind – a journal article, a policy brief or an opinion piece, and continue collaborating for the rest of the our professional lives. I would also like to see us interact more and share our experiences – especially since we all come from different parts of the world. I think our diverse perspectives (regional, subject, and training) would be a huge benefit to each other.



Thaís Lemos Ribeiro

Secretariat of Human Rights, Brazilian Government and University of Brasilia What kind of activities or conversation would you like to see more of among early career researchers in our field?

In my experience as an early career, having people to share and test your ideas, to read and comment on your work, to work together in projects and texts, and to share fears and victories, is very important in our journey. Normally, we only share accepted projects or articles, but academic life is much more than that. So, we can talk about opportunities, share available resources for academic life, get advice from early career and senior scholars, we can try to work closely in small groups (in writing groups, for example) and profit from the diversity of our group.

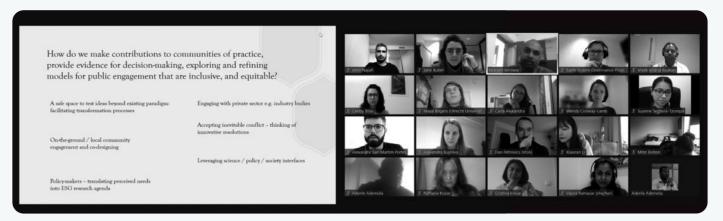


Cebuan Bliss

Radboud University, The Netherlands

What kind of activities or conversation would you like to see more of among early career researchers in our field?

How to support each other's mental and physical well-being. We all know that a career in academic research can be fast-paced and, at times, stressful. However, we can use this as a journey for self-exploration and development. All of us, most, likely decided to pursue research because we are intrinsically interested in our field. If we are lucky, this can be a fulfilling path with social purpose.



Session during the virtual Early Career Dialogues in October 2021

#### Earth System Governance Early Career Dialogues

The Early Career Dialogues was a virtual workshop across two days for PhD and early Post doctorate students. The impetus was to provide meaningful interactions and facilitate learning from multiple perspectives and diverse contexts. It was also a space for newer scholars to the project to engage with, and reflect upon the Earth System Governance Project's 2018 Science and Implementation Plan. Participants were also challenged to present their research in a short and playful manner via the medium of Pecha Kucha storytelling format.

The Early Career Dialogues was hosted across two days virtually in October, with a total of 15 hours of sessions for 43 participants from over 16 countries and 4 keynote speakers including:

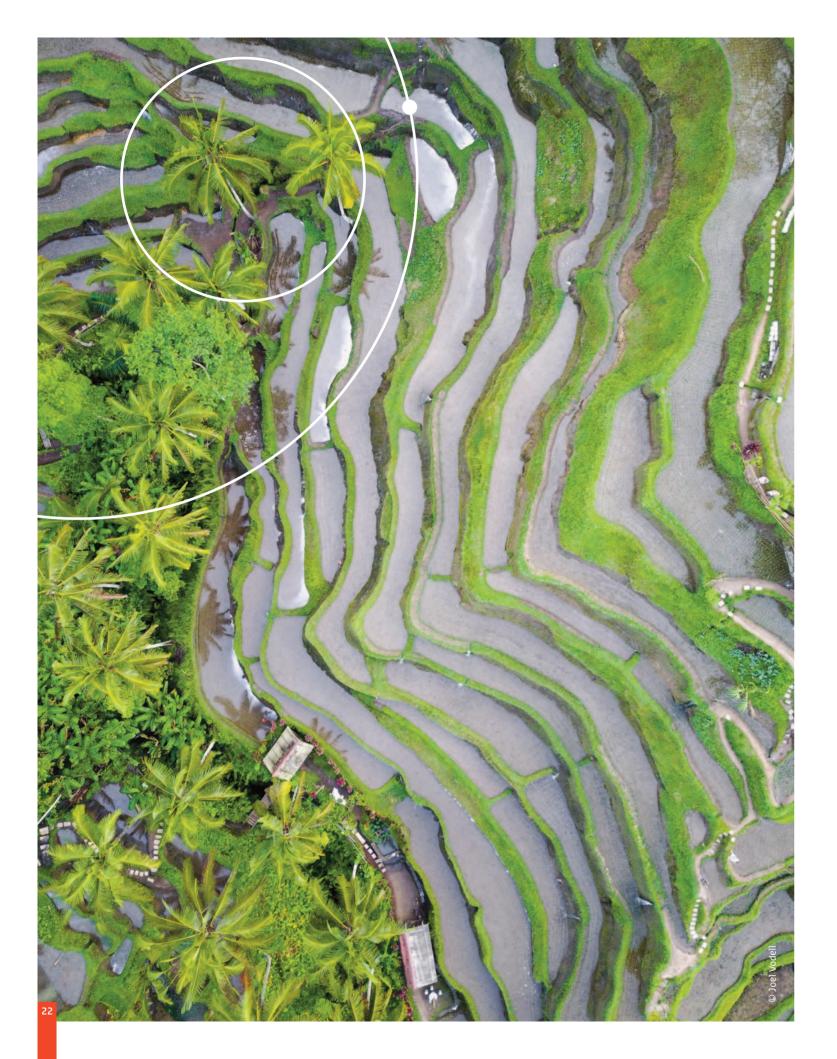
- Prof. Susan Park on Eco-Justice for Harm in International Development
- Prof. Louis Kotzé on Exploring the Potential of Earth System Law in a Intradisciplinary, Interdisciplinary and Transdisciplinary Setting
- Prof. Leticia Merino on Policies of natural resources and extractive economic models
- Prof. Aarti Gupta on Steering the Imagination: Anticipatory Governance of Speculative Technologies
- Dr. Joost Vervoort hosted a meditation session which included questions on how we can bring imagination into our research.

The Organizing Committee was led by SSC education lead Prof. Cristina Inoue, who has recently transitioned from Brazil to the Netherlands. Dr. Vasna Ramasar and Dr. Marta Berbés-Blázquez led the future thinking sessions, and made participants feel comfortable and acquainted through friendly icebreakers. Dr. Stanislava Brnkalakova and Dr. Ana Flávia Barros-Platiau were involved in facilitating various interactive sessions for participants. We extend our appreciation and thanks to the committee for making this event a success!



Pablo Serra-Palao University of Murcia, Spain

"The Early Career Dialogues were such a fantastic and one of a kind experience; I am grateful to the ESG Project for facilitating the perfect space where junior scholars from diverse disciplines can share their ongoing research and find support. I wish I had more of this in my country!"



# **Taskforces and Working Groups**

In 2021, several fellows led the creation of new Taskforces and Working Groups, mobilizing bottom-up energy and abridging identified research needs in alignment with the Earth System Governance Science & Implementation Plan.

Through taskforces and working groups, the Earth System Governance Project seeks to push the frontiers of research in specific areas of its research agenda. Taskforces are formal groups that mobilize scholars to collaboratively engage with key issues of governance of the environment and sustainability, within a well-defined research area. They are community-driven, commonly led by senior Research Fellows or Lead Faculty. Participation is open to any scholar who wishes to become engaged. Working groups are flexible research collaborations with smaller focus areas and commonly with limited time horizons. These groups either mobilize scholars toward an unexplored area of earth system governance research, or serve a niche topic within a Taskforce.

#### **New Taskforces and Working Groups**



#### **Asia Pacific Working Group**

Conveners: Dr. Annisa Triyanti and Prof. Paul Harris

The Asia-Pacific Working Group seeks to initiate collective and collaborative dialogue and discussion among scholars (from early career to senior scholars) who are interested in adding regional perspectives and insights of and from the Asia-Pacific region into Earth System Governance research. The aim of this working group is to reflect on research and experience in different fields and disciplines, and to apply earth system governance analytical frameworks to socio-ecological challenges within the Asia-Pacific region. An important focus of this working group is also to explore how earth system governance research in the Asia Pacific can contribute to the global ESG research agenda and improve current earth system governance in Asia-Pacific region, thereby making sustainable impacts on the ground.

In its first year in 2021, it organized four meetings. The group hosted a working group meeting during the Bratislava Conference. In December, the group organized a webinar as part of the ESG Speaker Series called "Climate change adaptation and mitigation policy: from Glasgow to the Asia-Pacific". The group is currently working on a position paper to outline the importance of earth system governance in the Asia Pacific Region. A chapter authored by the working group is submitted to an edited book "Environmental Governance in Indonesia" which will be published by Springer Nature, entitled "Earth System Governance in Indonesia: An Initial Investigation". It should be available by the end of this year.



The GlobalGoals Webinar series was a fantastic outreach effort with seven individual sessions dealing with the political impact of the Sustainable Development Goals on key governance dimensions.





#### Taskforce on the Sustainable Development Goals

Conveners: Prof Frank Biermann, Dr. Thomas Hickmann, Dr. Carole-Anne Sénit and Dr. Yixian Sun

This taskforce was established in early 2021 and brings together an interdisciplinary global group of scholars and practitioners to advance the scientific understanding of 'governance by global goals' and in particular the steering effects of the Sustainable Development Goals. The Taskforce aims to build, invigorate and lead a diverse research community by providing an open forum for developing and exchanging cutting-edge research and policy studies on to what extent and under what conditions governance through goals can be effective.

The official launch of the ESG taskforce took place with virtual kick-off meeting on 29 April 2021, with the thematic focus on achieving the SDGs in times of Covid-19. The meeting at the Bratislava ESG Conference was focused on the planning of future activities. The groups has an ongoing publication project: An edited volume published with Cambridge University Press on the Political Impact of the Sustainable Development Goals, due to be available in May 2022. The GlobalGoals Webinar series was a fantastic outreach effort with seven individual sessions dealing with the political impact of the Sustainable Development Goals on key governance dimensions.



#### Taskforce on Knowledge Cumulation

Conveners: Dr. Jens Newig and Dr. Michael Rose

The Earth System Governance 'Taskforce on Knowledge Cumulation' seeks to bring together scholars that share a common interest in making ESG research – and environmental governance research more broadly – more cumulative. the taskforces looks to the diversity of research strands and epistemologies within the community. The aim is to foster collaboration on shared research agendas, theoretical approaches, frameworks, methods, and datasets. It launched with its first meeting at the Bratislava Conference in September.



#### **Taskforce on Climate Governance**

Conveners: Prof. Frank Biermann, Prof. Chukwumerije Okereke and Prof. Kyla Tienhaara

The new Taskforce on Climate Governance launched officially by hosting a semi-plenary session at the Bratislava Conference. This taskforce strengthens climate policy research within the Earth System Governance community and beyond, and mobilizes the entire breadth and wealth of the network, from the conceptual and theoretical diversity of the hundreds of affiliated ESG scholars to the broad research expertise on other planetary socio-ecological systems beyond climate, such as biodiversity and oceans. Within it, several working groups are developing, such as an active group of scholars focusing on Carbon Removal Governance.



#### Taskforce on the Governance of Nature and Biodiversity

Conveners: Prof. Hens Runhaar and Dr. Yves Zinngrebe

The Taskforce on the Governance of Nature and Biodiversity seeks to bring together a diverse set of social science researchers working on the governance of nature from a variety of disciplines. Areas of interest include subjects and meanings associated with nature and biodiversity and their implications, new forms of governance such as 'telecoupling governance' and public-private partnerships; effectiveness of public and private governance arrangements; legitimacy and contestation; actor networks, power and accountability; and science-policy interfaces. The Taskforce organized its first meeting at the 2021 Bratislava Conference on Earth System Governance, where it also hosted Full Panels and an Innovative Session.

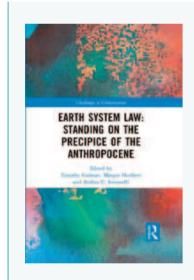
#### **Ongoing Taskforce and Working Group Updates**

#### Taskforce on Earth System Law

#### Conveners: Dr. Catherine Blanchard, Dr. Rakyhun Kim and Prof. Louis Kotzé

The Taskforce on Earth System Law has been running for several years now. It was active at the Bratislava Conference this year, hosting two panels on Earth System Law: "Transformation and law futures" and "Earth system law and global governance". They also hosted a general meeting at the Taskforce Meeting Day. Throughout the year, virtual workshops were held both for the Asia-Pacific time-zone scholars and the Europe-America time-zone scholars.

In 2021, the Kotze & Kim 2019 article 'Earth system law: The juridical dimensions of earth system governance' was cited 37 times. Among the papers included in the special issue, Kotze et al. (Earth System Law: Exploring New Frontiers in Legal Science) is expected to emerge as a major research output of the task force. Their ESG Speaker Series on Earth System Law was held in February and attracted 200 registrations.

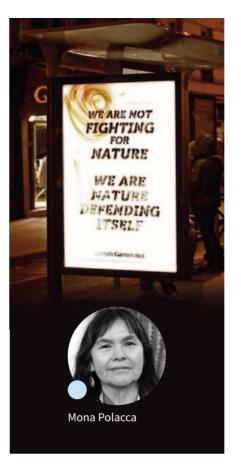


#### Featured Publication

Earth System Law: Standing on the Precipice of the Anthropocene

Edited by Timothy Cadman, Margot Hurlbert, Andrea C. Simonelli

This book systematically explores the emerging legal discipline of Earth System Law, challenging the closed system of law and marking a new era in law and society scholarship.



# Working Group on Environment, Representation and Rights (ESGRREW)

#### Conveners: Prof. Peter Stoett and Dr. Sandy Lamalle

The ESGRREW investigates the conceptual framework and building blocks of international environmental law and governance: the human-nature relationship, the representations of the environment embedded within global cultures, and the establishment of environmental rights. In 2021, the group organized the International Conference 'Justice Between Generations: Asian, African, Indigenous, and Western Perspectives', at Concordia University (and online), in Montreal, September 28 - October 1st 2021.

It was organized in partnership with the Nature-Time-Responsibility international network in philosophy and ESGRREW, with the patronage of UNESCO. The aim was to facilitate and promote sustained intercultural dialogue on the topic of moral, legal, and political responsibilities to future generations and to nature across time.

Opening presentation on 'Indigenous World View: Intergenerational Ethics and Heritage', by Grandmother Mona Polacca, a Hopi/Havasupai/Tewa Elder, Senior Fellow of the Centre for Earth Ethics, and member of International Council of Thirteen Indigenous Grandmothers.

#### **Urban Working Group**

#### Conveners: Dr. Linda Westman, Dr. Rachel Macrorie and Dr. Marielle Papin

The group hosted an Innovative Session at the Bratislava Conference. The virtual session brought together scholars, activists, and policy practitioners to debate the conceptual, methodological, practical, and ethical challenges generated by compound crises interactions. A collaborative paper was put together by several authors on this topic of Compound Urban Crises.



#### **Featured Publication**

#### Compound urban crises. Westman et al, Ambio 2021

A team of scholars from the Earth System Governance Urban Working Group argue that we need to recognise turbulence as a pervasive phenomenon that often manifests in cities. This form of upheaval, which can be called 'compound urban crises', can only be understood by drawing on different forms of knowledge. In this paper, insights from complex adaptive systems (CAS) theory and critical urban studies (CUS) are uniquely drawn together to reflect on what challenges this presents for urban governance.



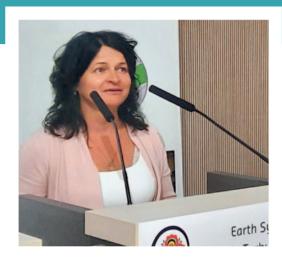
#### **FULL LIST OF TASKFORCES AND WORKING GROUPS:**

- Taskforce on Planetary Justice
- Taskforce on Earth System Law
- Taskforce on Ocean Governance
- Taskforce on New Technologies
- Taskforce on Anticipatory Governance
- Taskforce on the Sustainable Development Goals
- Taskforce on Knowledge Cumulation
- Taskforce on Climate Governance
- Taskforce on the Governance of Nature and Biodiversity
- Working Group on Democracy
- Urban Working Group
- Asia-Pacific Working Group
- Working Group on Environment,
   Representation and Rights
- Carbon Removal Working Group
- Working Group on Economic Downturn and Climate Action





# 2021 Bratislava Conference on Earth System Governance



Prof. Tatiana Kluvánková opens the conference

#### **HOSTS**



CO-HOSTS











SUPPORTED BY







The annual conference is the key activity that mobilizes the Earth System Governance community each year. For this long-standing tradition of global conferences, the Earth System Governance Project partners with universities and organisations world-over. This year, our hosts in Bratislava were CETIP, SlovakGlobe, Slovak Academy of Sciences, and Slovak University of Technology. The Conference Chair Prof. Tatiana Kluvánková assembled the local team of academics including Natalia Nováková, Tomas Szabo, Dominik Horvath, Dr. Stanislava Brnkalakova and Dr. Martin Spacek.

The conference manager was Ivana Vybochova who also arranged the lively cultural and social programme alongside the conference. From day one, the 'on-site' blended into the virtual as we came together both online and in Bratislava.

# Conference Co-Hosts led various semi-plenary sessions

Our Co-Hosts and partners hosted a range of semi-plenary sessions.

The German Development Institute hosted the Science Policy Forum on international biodiversity governance. The panel of experts painted a picture of the promises and pitfalls of the Kunming Biodiversity Framework, and its relevance for transformative change in biodiversity policy and practice. The Institute of Water Policy of Lee Kuan Yew School of Public Policy at the National University of Singapore reflected on the lessons from their research in informing practical policy analysis and the choice of "fit for purpose" policy tools. The Earth System Governance Research Centre at Stockholm University hosted a session in which leading scholars and practitioners took stock



#### 2021 BRATISLAVA CONFERENCE IN NUMBERS:



- **3** Plenary Sessions
- 6 Semi-Plenary Sessions
- 10 Innovative Sessions
- 86 Parallel Panel Session



350 Papers presented



**426** People registered



#### THE TASKFORCE & MEETING DAY

- 10 Sessions hosted
- 42 People registered for the day

The Keynote speaker of the 2021 Bratislava Conference, Prof. Karen O'Brien, explained in the opening plenary, "it's all about relationships".

The connections and conversations throughout the three days were representative of an inspiring movement in our field of research.

The opening plenary session was a memorable moment that left ripples of impressions across the community.



of 50 years of global environmental diplomacy and transnational sustainability governance. The African Research and Impact Network (ARIN) explored how the post-pandemic recovery in Africa can be leveraged to promote stronger and more ambitious climate action, thus contributing to sustainable development. Social Innovation in Marginalised Rural Areas (SIMRA) hosted 'Social and Digital Innovation to Promote Transformation for Green Recovery and a Carbon-neutral Europe'.

Across the Conference days Parallel Panels and Innovative Sessions explored a plethora of topics, discussed and built upon theoretical discussion and interrogated new scientific insights.' Topics ranged from Future Negotiation on Marine Biodiversity, to decolonizing methods of sociotechnical transformations to sustainability, as well as integrating science-based targets with justice goals and social science research. At the Closing Plenary Session, Conference Chair Prof.

Tatiana Kluvánková provided three prominent aspects that encapsulated this annual Earth System Governance conference: collaboration, social change, and the (virtual) community – all of which were in focus throughout the week.

The Earth System Governance Project wishes to extend our sincere gratitude to the warm hospitality shown by the Organizing Team and their efforts in managing this particularly challenging conference due to the uncertainty surrounding the pandemic.

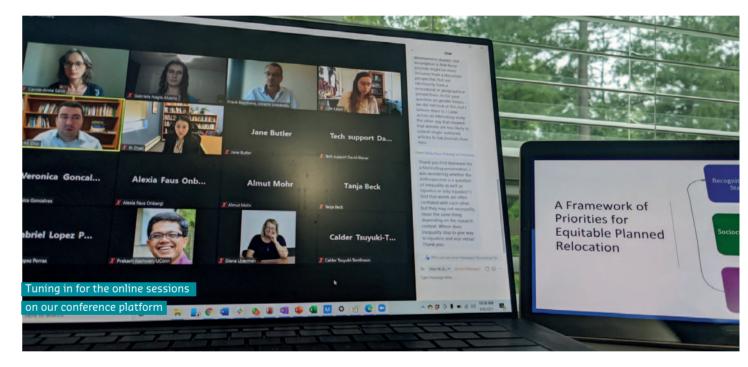
What our attendees talked about on in Twitter conversations during the

conference #2021ESG Conference



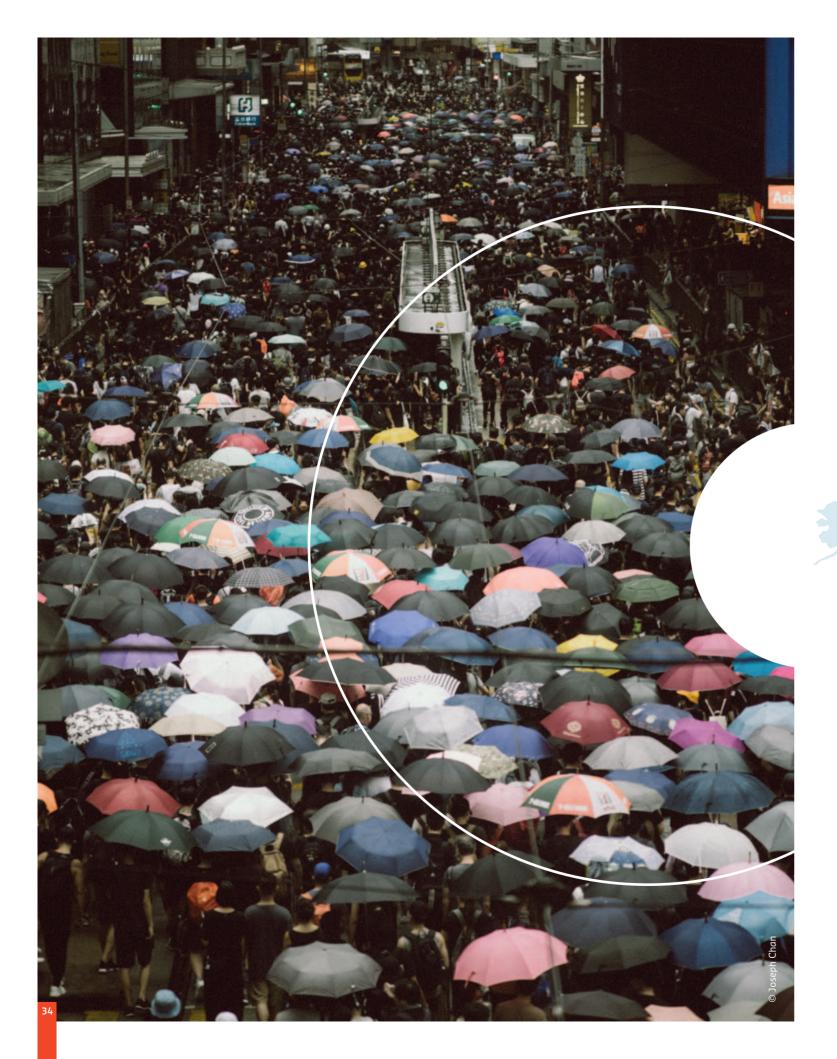












# Research Centres, Associated Activities, Science Policy

#### **Research Centres**

The Earth System Governance Project strongly relies on a broad network that reflects the interdisciplinary, international, and multi-scale research challenge. The project is therefore strategically growing regionally through its research centres. Research Centres are a key academic and institutional mechanism by which the project's work is implemented. These Centres in Africa, Asia, Australia, the Americas and Europe are research hubs that support the implementation of specific parts of the Earth System Governance Science and Implementation Plan and act as focal points for earth system governance research in their geographical and thematic area.



- 2. Research Centre Amsterdam
- 3. Research Centre Australia
- 4. Research Centre Bonn
- 5. Research Centre Brasilia
- 6. Research Centre Central and Eastern Europe
- 7. Research Centre Chiang Mai
- 8. Research Centre Colorado

- 10. Research Centre Nairobi
- 11. Research Centre Norwich
- 12. Research Centre Oldenburg
- . . . .
- 13. Research Centre Paris
- 14. Research Centre Shonan Fujisawa
- 15. Research Centre Stockholm
- 16. Research Centre Toronto
- 17. Research Centre Utrecht

#### Research Centre Stockholm

In 2021, the Research Centre Stockholm transitioned to Stockholm University. The Department of Political Science at Stockholm University acting as the central node. The Research Centre focuses on research areas such as global environmental politics, EU and multilateral diplomacy for sustainable development and climate policy, democratic legitimacy and effectiveness global environmental governance, geopolitics of sustainable development, comparative environmental policy and natural resource management. The Department houses the research group on Environmental Politics, Policy and Learning (EPPLE). EPPLE is part of Stockholm University initiative Environmental Research in the Human Science Area including faculties of law, humanities and social science. The Bolin Centre for Climate Change and the Stockholm Resilience Centre are other key focal points for the Research Centre Stockholm.

#### **Research Centre Paris**

To celebrate its 20th anniversary, IDDRI together with Science Po of the ESG Paris Research Centre hosted a major international conference on October, 12-14 2021. The event "Planetary governance for a sustainable recovery: Next generation multilateralism" hosted back to back sessions across two days which was free to access for a global audience.



# PROBLEMSHIFTING

#### **Endorsed Project**

#### **PROBLEMSHIFTING**

The Earth System Governance Project endorsed the Problemshifting Research Project, directed by Asst. Prof. Rakhyun E. Kim. This research project investigates the causes and effects of problem-shifting between international environmental treaty regimes, with a view to improving their overall effectiveness. The project recruited a team of three PhD researchers this year. It is funded until 2026 through a 1.5 million euro 'Starting Grant' awarded by the European Research Council.



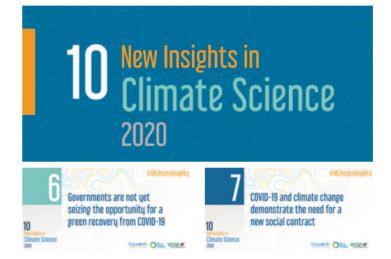
#### **Endorsed Conference**

The Network for Education and Research on Peace and Sustainability held the inaugural "Hiroshima International Conference on Peace and Sustainability 2022" from 1st to 4th March, 2022. The conference was organized in collaboration with several institutions, including the Earth System Governance Project. This hybrid conference included 32 sessions, with nearly 200 participants from 38 countries including Japan ranging from academic researchers, graduate students, policy makers, representatives of non-governmental organizations, and private companies.

#### Science-Policy and Outreach

Earth System Governance scholars part of interdisciplinary team of leading global researchers that produced the "10 New Insights in Climate Science" report.

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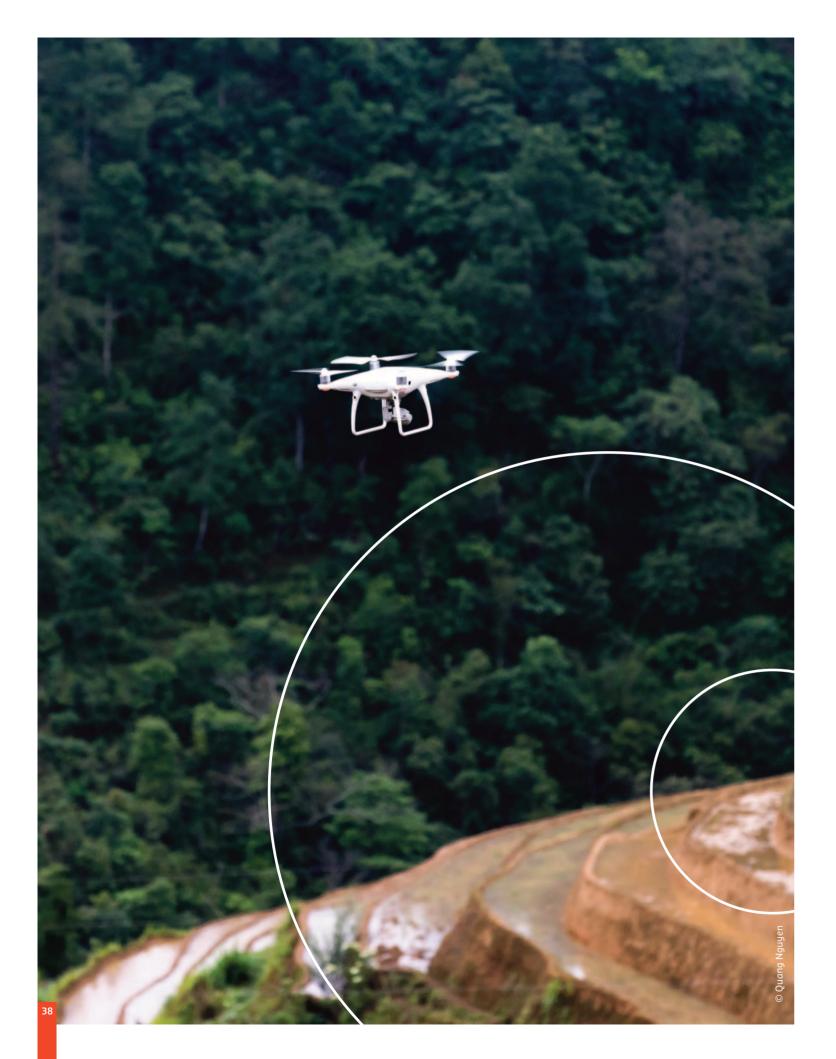


Each year Future Earth consults with researchers and carries out a horizon scan in fields related to climate change to assess the latest findings and most important new emerging trends. Earth System Governance fellows Otto Spijkers, Thomas Hickman, Michelle Scobie and Jakob Skovgaard and Pedro Henrique Campello Torres were among 57 leading global researchers who contributed to this interdisciplinary effort. As a core project of Future Earth, the Earth System Governance Project contributes much needed governance and social science perspectives to the field of global environmental change.

While this report confirms the continued amplification of key environmental impacts, such as higher than expected emissions from permafrost thaw and possible weakening of the land sink, it also points to opportunities that arise from new insights in climate change economics and governance, and the possibility of using climate litigation. There is still a window of opportunity but 2021 will be a critical year to act if the world is to achieve the Paris Agreement targets.







## **Publications**

#### Flagship Publications

The Earth System Governance Project facilitates four publication outlets, consisting of a journal, two book series and an element series. The Earth System Governance Publications seek to advance knowledge in our field and provide authoritative stances on existing and emerging aspects of global environmental change issues, with distinguished members of the project acting as editors. There are four types are the ESG Journal, the ESG Cambridge Elements Series, The ESG Cambridge University Press, and the ESG MIT Press Series. In 2021, five books were published with our flagship publications, and two special issues were published in the journal.

#### Cambridge Elements

The Elements Series' format is that of a compact book, an attractive option for Earth System Governance Fellows who wish to present a concise, policy-relevant message in around 100 pages.



Cambridge Elements - Remaking Political Institutions: Climate Change and Beyond

James Patterson

This Element develops an original analytical foundation for studying institutional remaking and its political dynamics. It explains how institutional remaking can be observed and provides a typology comprising five areas of institutional production involved in institutional remaking (Novelty, Uptake, Dismantling, Stability, Interplay). This opens up a new research agenda on the politics of responding to institutional breakdown, and brings sustainability scholarship into closer dialogue with scholarship on processes of institutional change and development.



Cambridge Elements - Forest Governance: Hydra or Chloris? Bas Arts

Many forest-related problems are considered relevant today. One might think of deforestation, illegal logging and biodiversity loss. Yet, many governance initiatives have been initiated to work on their solutions. This Element takes stock of these issues and initiatives by analysing different forest governance modes, shifts and norms, and by studying five cases.

Interview with James Patterson on his recent book

"Political science, and much of academia, is about analyzing things that have already happened. But the challenge of urgent climate action and all sorts of other problems is that we need to better understand how to improve things, looking forward. But it's a tricky balance, to remain theoretically grounded at the same time as you try to think prospectively. In essence, I wanted to challenge myself (and the academic community) to put our theory to use in thinking about how to solve institutional problems in real-world setting which are not ideal, not a blank slate, and heavily contested."



#### Cambridge University Press Book Series



Adaptiveness: Changing Earth System Governance Bernd Siebenhüner and Riyanti Djalante

This book provides a state-of-the-art review of the conceptual development of adaptiveness as a key concept in the environmental governance literature, complemented by applications from global, regional, and national levels. It reviews the politics of adaptiveness, investigates which governance processes foster adaptiveness, and discusses how, when and why adaptiveness influences earth system governance. It is a timely synthesis for students, researchers and practitioners interested in environmental governance, sustainability, and social change processes.



**Democratic Norms of Earth System Governance** *Walter F. Baber* and *Robert V. Bartlett* 

This book analyzes five major normative principles, pairing each with one of the Earth System Governance Project's analytical problems to provide an in-depth discussion of the minimal conditions for environmental governance that can be truly sustainable.

"The network understands that global governance is the connection between the local and the global. The work on the idea that you have to recognize that what happens at the local has global implications, so writing a publication with ESG Cambridge Elements was a perfect fit for my research."

Interview with Susan Park



#### MIT Press

Learning in Governance: Climate Policy Integration in the European Union Katherine Rietig

An investigation of the role of learning and its impact on policy change, as exemplified in European Union climate policy integration.

Rietig looks in detail at examples of the Renewable Energy Directive and the Common Agricultural Policy.



#### Earth System Governance Journal

**The Earth System Governance Journal** is a flagship publication of the Earth System Governance Project. It is available for scholars to publish cutting-edge research of their own, as well as that presented at our conference, academic workshops, synthesizing work by our research taskforces, and similar activities. 2021, 90, 305 readers downloaded articles from the ESG Journal. Due to this success, the journal was also accepted for inclusion in Scopus and Clarivate Web of Science. 158 Authors published with the Journal last year.

2021 included issues 7, 8, 9, 10 including two Special Issues:

#### Special Issue on Towards a Sectoral Perspective on Global Climate Governance

*Tim Rayner, Sebastian Oberthür* and *Lukas Hermwille* coordinated this special issue. The authors derived six major findings from the contributions to this special issue:

- The barriers and challenges to decarbonisation vary significantly across sectoral systems.
- Similarly, the need and potential for the five functions of international governance institutions to contribute to effective climate protection also vary widely.
- While the pattern is uneven, there is a general undersupply of international climate governance.
- The sectoral analyses confirm that the UNFCCC and Paris Agreement play an important overarching role but remain limited in advancing effective sectoral governance.
- While non-environmental institutions may present important barriers to decarbonisation, more synergistic effects are possible.
- This sectoral approach provides a sound basis on which to identify sector-specific policy options.

#### **Special Issue on Earth System Law**

Earth System Law Taskforce conveners *Catherine Blanchard*, *Rakhyun Kim* and *Louis Kotzé* explain the process of creating a special issue in a cutting edge topic:

"One reason why the Special Issue project has been a success has to do with the concept itself—"earth system law". This concept has been effective in drawing people in, especially those who share our vision and the belief in the power of the concept. Perhaps it is the inclusive scope of earth system law research, or the normativity of earth system law, or the interdisciplinary character of our work that people like. What is certain, however, is that people enthusiastically responded to the call to explore earth system law and what it can do to envisage new perspectives, for research and for discussions more broadly.

The Special Issue was also a reflection on what the Task Force is about: a unique space for lawyers and law enthusiasts in the ESG Network, a sort of home for the law in a network that is predominantly non-law, a forum where we can interact with each other and with other disciplines. In many ways, we believe that the Task Force, and, by extension, the Special Issue and ESG journal, offer a useful outlet for lawyers who want to explore publication avenues other than in legal journals and broaden their network."



#### **Featured ESG Journal Publications**

#### The most cited article in 2021

Global governance for the decarbonization of energy-intensive industries: Great potential underexploited, Earth System Governance

Sebastian Oberthür, Gauri Khandekar, Tomas Wyns. Volume 8, 2021

#### Most downloaded articles in 2021

From Millennium to Sustainable Development Goals: Evolving discourses and their reflection in policy coherence for development

Eileen de Jong, Marjanneke J. Vijge. Volume 7, 2021

Governing fossil fuel production in the age of climate disruption: Towards an international law of 'leaving it in the ground'

Harro van Asselt. Volume 9, 2021

#### Most social media attention in 2021

The role of goal-setting in urban climate governance

Hege Hofstad, Marianne Millstein, Anders Tønnesen, Trond Vedeld,

Karsten Bruun Hansen. Volume 7, 2021

Global environmental agreement-making: Upping the methodological and ethical stakes of studying negotiations

Hannah Hughes, ... Yulia Yamineva. December 2021

#### **Also Featured**

Planetary just transition? How inclusive and how just?

Dimitris Stevis & Romain Felli. 2021

Reconciling safe planetary targets and planetary justice: Why should social scientists engage with planetary targets?

J. Gupta, D. Liverman, X. Bai, C. Gordon & D. Ciobanu. 2021

# **Community Publications**

The following analysis serves to better understand the scholarly interests and research undertakings of the Earth System Governance community of Fellows in 2021. The publication data was gathered through web searches on the online repositories Web of Science, Scopus, and Google Scholar, using the individual member name to be replace by Earth System Governance Fellows as search term and only including publications from the year 2021.

#### THE MOST POPULAR JOURNALS OF THE ESG COMMUNITY

#### Number of publications Journal Earth System Governance 25 Energy Research & Social Science 19 **Environmental Politics** Environmental Science & Policy 16 Sustainability 16 One Earth Journal of Cleaner Production Sustainability Science 13 Climate Policy 12 Ambio

#### TYPE OF PUBLICATIONS OF THE ESG COMMUNITY



#### THE MOST FREQUENT KEYWORDS FROM PUBLICATIONS IN 2021



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The Earth System Governance Project has its International Office housed at the Copernicus Institute of Sustainable Development, Faculty of Geosciences, Utrecht University. The Earth System Governance Project is a Global Research Project of Future Earth.

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