



INTERNATIONAL SDG RESEARCH
SYMPOSIUM

GLOBALGOALS2020

9-11 June 2020

A virtual symposium hosted by Utrecht University

Conference Programme

A fully virtual research conference

Due to the Covid-19 pandemic, we transformed the International SDG Research Symposium GLOBALGOALS2020 into a fully virtual event. We are delighted to see that this move has hugely increased the global inclusiveness of our conference and that more than 700 international colleagues could now register, with hundreds more being able to follow our plenaries through the YouTube channels of Utrecht University.

For questions or suggestions, please contact us at globalgoals@uu.nl

Funded by the
European Research Council



Host



Co-hosts



Deutsches Institut für
Entwicklungspolitik



German Development
Institute



MONASH
University



SOUTHERN VOICE



Sponsors



Pathways to
Sustainability

Endorsed by



CONTENTS

WORDS OF WELCOME	4
ABOUT THE SYMPOSIUM	5
HOSTS	7
CO-HOSTS	8
SPONSORS	9
ORGANISATION	10
PLENARY SESSIONS	12
PARALLEL PANEL SESSIONS	14
STREAM I: IMPLEMENTATION AT MULTIPLE LEVELS	15
STREAM II: INTEGRATION AND INTERLINKAGES	35
STREAM III: INCLUSIVENESS	48
STREAM IV: PLANETARY INTEGRITY	56
STREAM V: INDICATORS AND METHODS	62
LIST OF REGISTERED PARTICIPANTS	70

WORDS OF WELCOME

Dear participants,

A physically distant, yet warm personal welcome to the International SDG Research Symposium 'GLOBALGOALS2020'! It is our great pleasure to host this first research conference on the steering effects of the Sustainable Development Goals, and we thank you all for taking up this exciting and important challenge with us!

The GLOBALGOALS2020 Research Symposium promises to be a one-of-a-kind experience in many ways. It is the first attempt to gather the community of researchers and experts who study the Sustainable Development Goals as the premier and most comprehensive example of 'governance through goals'. Over three exciting days, you will be able to engage in inspiring panel discussions all related to the transformative potential of the Sustainable Development Goals, with a focus on five key areas: the implementation of Sustainable Development Goals at multiple levels, including the factors that may explain progress as well as barriers; the many interlinkages among and integration of Sustainable Development Goals; the quest for the global and local inclusiveness of programmes and policies to implement the Sustainable Development Goals; the crucial ecological integrity of the implementation of the Sustainable Development Goals at planetary level; and the assessment of all existing knowledge on assessment indicators and methods.



The GLOBALGOALS2020 Research Symposium, which we had planned over a year as a physical event in beautiful historic locations in Utrecht, has now at rather short notice been transformed into a fully virtual conference, with online participation of colleagues from all over the world in real time. In only three months, in times of intense professional and personal pressures, our dedicated and diligent conference team has done a tremendous job in preparing the virtual symposium and mastering the often novel challenges linked to an online format. There is no doubt: such a completely virtual conference will be different. We will miss the close contact, the informal interactions, the easy way of sharing knowledge and making friends, and the splendid environment of our historic buildings that date back more than five hundred years.



And yet, we are also excited by this prospect and unexpected opportunity to pioneer a totally new way of academic cooperation, global collaboration, and virtual networking, without any carbon dioxide emissions and, after all, at a much lower cost for us as organisers and you as participants. Importantly, this new format of virtual conferences will make our conference much more inclusive especially with a view to colleagues from the Global South, who will be stronger represented. In addition, many of our discussions will be accessible to all Internet users all over the world at any time, again expanding the global dissemination of knowledge and enhancing the full democratisation of science.



We hope this Symposium will set the first milestone in building a strong research community for studying the newly important mode of 'governing by global goals' and the SDGs. We look forward to working with you all in the years to come.

On behalf of our entire team and all co-hosting organisations and partners, we wish you an inspiring and productive Symposium!

Frank Biermann, Thomas Hickmann, and Carole-Anne S nit
Co-Chairs of GLOBALGOALS2020, the International SDG Research Symposium

ABOUT THE SYMPOSIUM

In 2015, the international community adopted 17 Sustainable Development Goals with 169 targets as part of a global 2030 Agenda for Sustainable Development. The ambition expressed in these goals is unprecedented; the Agenda aims at nothing less than ‘Transforming Our World’. But can this prominent example of global goal setting, as a new central approach in global governance, help resolve the pressing challenges of economic development, poverty eradication, social justice, and global environmental protection? Nobody knows at this stage. While the United Nations and its member states place great hopes on this novel strategy, there is little scientific knowledge on whether such global goals can live up to exceedingly high expectations. How can ‘global governance through goals’ be effective – and under which conditions?

The 2020 SDG Research Symposium provides a forum for the exchange of cutting-edge research and policy studies on this question. The Symposium brings together a broad group of leading social scientists from universities and prominent think tanks for a first stocktaking of what we know about the actual impact of ‘governance through goals’. The SDG Research Symposium will not address sustainability governance as such but focus on assessing the effects of global goal setting, with special emphasis on the Sustainable Development Goals as the premier and most comprehensive global goal-setting effort to-date.

The symposium addresses five broader research streams:

(1) Implementation at Multiple Levels: To what extent have the Sustainable Development Goals been effective so far in achieving their stated objectives? Where are main areas of success or failure? And where can we attribute positive changes and progress to the agreement on the SDGs in 2015?

(2) Integration and Interlinkages: The Sustainable Development Goals are to align the efforts of public and private actors around their ambitious agenda, and to further the integration of governance instruments at global and national levels in support of the goals. To what extent is such integration of governance around the 17 goals in fact observable? Where are actors aligning their efforts, and to what extent is this attributable to the goals that were adopted in 2015? Moreover, the Sustainable Development Goals were designed to advance overall coherence in sustainability governance – yet often they seem to operate in silos. There might be trade-offs between some goals, and actors might prefer one goal over the other. Research into the interlinkages between these goals is thus highly important to inform policy and provide evidence-based recommendations on how to resolve trade-offs, leverage synergies, and accelerate progress across all 17 Sustainable Development Goals.

(3) Inclusiveness: The Sustainable Development Goals follow an agenda of leaving ‘no one behind’ and shall advance the interests of the poorest and most vulnerable people. Increased inclusiveness of governance arrangements and processes is one of the key aspirations associated with the Sustainable Development Goals. Yet, to what extent can we observe a better inclusion and support of poor and vulnerable communities within countries, and internationally of the Least Developed Countries? Did the promise of 2015 materialise in actual policies since then?

(4) Integrity with Planetary Systems: The claim behind the Sustainable Development Goals is that they help align social justice with the protection of the life-supporting earth systems. Yet to what extent did the Sustainable Development Goals really advance planetary ecological integrity, especially in areas and policy fields that have so far only marginally been associated with ecological concerns? Where can we observe changes towards more planetary integrity in governance efforts that can be attributed to the SDGs?

(5) Indicators and Methods: Finally, the SDG Research Symposium focuses on the best-suited methods to identify and trace impacts of the Sustainable Development Goals. We hope for extensive accounts from the humanities and qualitative social sciences approaches, including discursive and interpretative work on the

role that the Sustainable Development Goals could play so far. The Symposium also features quantitative work on the Sustainable Development Goals, including social network analysis and integrated assessment models. We especially seek to bring quantitative and qualitative work in conversation, while creating enough space for both meta approaches to further improve and fine-tune their methodological toolboxes.

The 2020 SDG Research Symposium features contributions from all disciplines and intellectual traditions. We focus on research on the impacts and politics of global goal-setting as a mode of global and national governance – and here on the Sustainable Development Goals in particular.

The symposium produces research outputs that will be widely disseminated within and beyond academia, including a journal special issue on ‘governance through goals’ and a high-level article, along with a policy statement to harvest the academic and policy findings of the now virtual 2020 SDG Research Symposium.

HOSTS

Copernicus Institute of Sustainable Development, Utrecht University

The International SDG Research Symposium GLOBALGOALS2020 is hosted by the Copernicus Institute of Sustainable Development. The Copernicus Institute has been founded to develop high-quality knowledge on sustainable development

issues in order to support the global transition to a sustainable society. Given the integrated nature of sustainable development challenges, multidisciplinary research is key. The Copernicus Institute integrates knowledge especially from four fields: Energy and Resources, Environmental Governance, Environmental Sciences, and Innovation Studies. The Copernicus Institute's research contributes to improved knowledge related to all 17 SDGs. The Institute is part of the Faculty of Geosciences at Utrecht University.

Founded in 1636, Utrecht University is one of the oldest universities in the Netherlands. Various venues throughout Utrecht's historic city centre and the modern science park 'De Uithof' turn the university into an integral part of the cityscape. Over 30,000 bachelor and master students are enrolled in the university's seven faculties and three teaching institutes. For sixteen years, Utrecht University has been listed as the best Dutch university in the Academic Ranking of World Universities. In 'Environmental Sciences', Utrecht University is ranked as the 13th best university world-wide.



Utrecht University

GLOBALGOALS Project

The ambition expressed in the 2030 Agenda of Sustainable Development is unprecedented. Scientific evidence on whether the SDGs can live up to the exceedingly high expectations, however,

is lacking. The GLOBALGOALS Project has been designed to bridge this knowledge gap. Within this five-year study programme, funded by an 'Advanced Grant' from the European Research Council, we investigate how and under which conditions 'global governance through goals' can nonetheless be effective. In deploying a unique set of cutting-edge methodologies, GLOBALGOALS assesses and explains the steering effect of the SDGs through detailed investigations of their institutional arrangements and actor networks. Our research will offer the first and most comprehensive data compilation, network mapping and comparative institutional analysis of the evolution, effectiveness and future prospects of 'global governance through goals'. It will provide crucial contributions to both the theory of global sustainability governance and the successful implementation of the 2030 Agenda for Sustainable Development.



GLOBALGOALS
Research for Sustainability

CO-HOSTS



Deutsches Institut für
Entwicklungspolitik



German Development
Institute

The **German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)** is one of the leading think tanks for global development and international cooperation worldwide. It is located in the United Nations City of Bonn. DIE's work is based on the interplay between research, policy advice and training. DIE is building bridges between theory and practice. Research at DIE is theory-based, empirically-driven and application-oriented. It provides the basis for the consulting activities of the institute. DIE develops policy-relevant concepts, advises ministries, governments and international organisations, and refers to current policy issues. The training programmes of the institute for university graduates and young professionals are integrated into the research and advisory process.



MONASH
University

Monash University, established in Melbourne in 1958, currently counts over 80.000 students on campuses in Australia, Malaysia, China, India and Italy. Following the motto 'Ancora Imparo' (I am still learning), the university is a valuable contributor to new scientific knowledge generation. Monash University is committed to playing a fundamental role to achieving the SDGs. Across its ten faculties, the university has a wealth of sustainable development expertise and provides with the Monash Sustainable Development Institute an important platform to share that expertise with industry and government.



SOUTHERN VOICE

Southern Voice is an open platform for think tanks that contributes to the global dialogue on the Sustainable Development Goals. It aims for the removal of the existing 'knowledge asymmetry' and 'participation deficit' in inter-governmental relations on the SDGs by empowering think tanks from the Global South, embedding Southern research in the global discourse on the SDGs, promoting space for deliberative evidence-based policymaking and ensuring that governments are held accountable for it. Since its creation in 2012, Southern Voice has evolved into a vibrant network of over 50 think tanks from Africa, Latin America and Asia that demands a world in which people's rights and needs are met and sustainable development is achieved.

US
UNIVERSITY
OF SUSSEX



Institute of
Development Studies

The **Sussex Sustainability Research Programme (SSRP)** represents a collaboration between the schools of Business Management and Economics; Global Studies; Law Politics and Sociology; and Life Science of the University of Sussex, and the Institute of Development Studies. With its focus on possible trade-offs among SDGs, and solutions that avoid these trade-offs, the SSRP is one of the leading research organisations in the field, hereby integrating natural science, social science, and the humanities. The SSRP has funded 20 interdisciplinary research projects focusing on trade-offs among SDGs. These are grouped in six clusters: Biodiversity and Food, Climate and Food Insecurity, Global Health and the Environment, the Peri-Urban Environment, Sustainability Perspectives, and Trade Debt and the SDGs.

SPONSORS

European Research Council

The European Research Council (ERC) is the flagship for the European Union's Research Framework Programme. Through competitive funding, the ERC encourages the highest quality research in Europe and supports investigator-driven, bottom-up frontier research across all fields.

In the long-term, the ERC aims to substantially strengthen the European research system and make its research base more prepared to be able to respond to the needs of a knowledge-based society.

Moreover, it supports universities and research institutes in establishing themselves as more effective global players.

The ERC supports the GLOBALGOALS Project through an Advanced Grant, the highest personal award by European Union institutions.



European Research Council
Established by the European Commission

Pathways to Sustainability

What is needed to enable the transition towards a more sustainable society? Pathways to Sustainability, one of the four interdisciplinary research foci at Utrecht, contributes to a sustainable future by means of transdisciplinary research. Excellent researchers from the humanities, social and natural sciences work together with external partners to develop a more sustainable society.



**Pathways to
Sustainability**

ORGANISATION

Co-Chairs

FRANK BIERMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

THOMAS HICKMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

CAROLE-ANNE SÉNIT, UTRECHT UNIVERSITY, THE NETHERLANDS

Scientific Advisory Group

DEBAPRIYA BHATTACHARYA, CENTRE FOR POLICY DIALOGUE, BANGLADESH, AND SOUTHERN VOICE

PAMELA CHASEK, MANHATTAN COLLEGE, UNITED STATES OF AMERICA

MÅNS NILSSON, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN

SHEILA OPARAOCHA, ENERGIA INTERNATIONAL NETWORK ON GENDER AND SUSTAINABLE ENERGY, THE NETHERLANDS

IMME SCHOLZ, GERMAN DEVELOPMENT INSTITUTE, GERMANY

MICHELLE SCOBIE, THE UNIVERSITY OF THE WEST INDIES, TRINIDAD AND TOBAGO

JOHN THWAITES, MONASH UNIVERSITY, AUSTRALIA

SÉBASTIEN TREYER, INSTITUTE FOR SUSTAINABLE DEVELOPMENT AND INTERNATIONAL RELATIONS, FRANCE

JOHN THOMPSON, UNIVERSITY OF SUSSEX, UNITED KINGDOM

Conference Manager

LEONIE GROB, UTRECHT UNIVERSITY, THE NETHERLANDS

Organisation Team

MAYA BOGERS, UTRECHT UNIVERSITY, THE NETHERLANDS

MELANIE VAN DRIEL, UTRECHT UNIVERSITY, THE NETHERLANDS

JULIA FRITZSCHE, UTRECHT UNIVERSITY, THE NETHERLANDS

FRANCESCO S. MONTESANO, UTRECHT UNIVERSITY, THE NETHERLANDS

ABBIE YUNITA, UTRECHT UNIVERSITY, THE NETHERLANDS

Public Relations and Outreach

CHARLOTTE BALLARD, UTRECHT UNIVERSITY, THE NETHERLANDS

JOANNE PROCTOR, UTRECHT UNIVERSITY, THE NETHERLANDS

Technical Facilitators

VERA BEKKERS, UTRECHT UNIVERSITY, THE NETHERLANDS

JANA BIRNER, UTRECHT UNIVERSITY, THE NETHERLANDS

NIENKE BOLAND, UTRECHT UNIVERSITY, THE NETHERLANDS

SVEN BORGHART, UTRECHT UNIVERSITY, THE NETHERLANDS

PLAMENA CHOTOVA, UTRECHT UNIVERSITY, THE NETHERLANDS

JOUK HOGENHUIS, UTRECHT UNIVERSITY, THE NETHERLANDS

FABIENNE HORNEMAN, UTRECHT UNIVERSITY, THE NETHERLANDS

MAXIMILIEN GUIAN ILLANES, UTRECHT UNIVERSITY, THE NETHERLANDS

MARIJN KALLENBERG, UTRECHT UNIVERSITY, THE NETHERLANDS

NOA KLAPWIJK, UTRECHT UNIVERSITY, THE NETHERLANDS

STELLA PFUND, UTRECHT UNIVERSITY, THE NETHERLANDS

SUZANNE SPIJKERS, UTRECHT UNIVERSITY, THE NETHERLANDS

MATTEO SPINAZZOLA, UTRECHT UNIVERSITY, THE NETHERLANDS

KARIANNE TARANGER, UTRECHT UNIVERSITY, THE NETHERLANDS

FENNA VOGELZANG, UTRECHT UNIVERSITY, THE NETHERLANDS

ALINA WEIß, UTRECHT UNIVERSITY, THE NETHERLANDS

BRANDON WHITLEY, UTRECHT UNIVERSITY, THE NETHERLANDS

DROOVI DE ZILVA, UTRECHT UNIVERSITY, THE NETHERLANDS

PLENARY SESSIONS

Plenary I: The Transformative Potential of the SDGs

Time: 9 June, 14:00-15:30 UTC+2

Weblink: See the YouTube video [here](#)

The 2030 Agenda aims at nothing less than ‘Transforming Our World’. But to what extent can the 17 SDGs and 169 targets trigger a real transformation towards sustainable development? The opening panel raises this question and takes stock of the past five years of implementing the SDGs.

CHAIR: FRANK BIERMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

SPEAKERS:

FRANK BIERMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

The Steering Effects of SDGs: Research and Policy Challenges

PAMELA CHASEK, MANHATTAN COLLEGE, UNITED STATES OF AMERICA

The Vision behind the SDGs and Resulting Challenges

Plenary II: The Universal Aspiration of the SDGs

Time: 10 June, 14:00-15:30 UTC+2

Weblink: See the YouTube video [here](#)

In contrast to previous development agendas, the SDGs have a universal aspiration and turn all nations into ‘developing’ countries. However, does the current framework allow for global inclusiveness and equity? This plenary addresses this question and discusses existing gaps in equal representation at global level.

CHAIR: CAROLE-ANNE SÉNIT, UTRECHT UNIVERSITY, THE NETHERLANDS

SPEAKERS:

DEBAPRIYA BHATTACHARYA, CENTRE FOR POLICY DIALOGUE, BANGLADESH, AND SOUTHERN VOICE

The Second Generation Challenges of SDG Delivery and their Implications for Inclusiveness

SHEILA OPARAOCHA, ENERGIA INTERNATIONAL NETWORK ON GENDER AND SUSTAINABLE ENERGY, THE NETHERLANDS

Gender in the Transition to Sustainable Energy for All

SÉBASTIEN TREYER, INSTITUTE FOR SUSTAINABLE DEVELOPMENT AND INTERNATIONAL RELATIONS, FRANCE

Linking Environmental Emergency and the Reduction of Inequalities: A Universal Need for Transformation with Specific National Pathways

Plenary III: Revisiting Multi-Layered Governance for Sustainable Development

Time: 11 June, 9:00-10:30 UTC+2

Weblink: See the YouTube video [here](#)

To achieve sustainable development, coordinated efforts across governmental levels are needed. The SDGs provide numerous incentives for collaboration. This plenary session looks at key actors at different governmental levels and examines how the SDGs are changing existing institutional landscapes for achieving sustainable development.

CHAIR: THOMAS HICKMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

SPEAKERS:

MÅNS NILSSON, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN

Policy Coherence and the SDGs: Tools for Governing Trade-offs

IMME SCHOLZ, GERMAN DEVELOPMENT INSTITUTE, GERMANY

Implementing the 2030 Agenda: On the Road for Socio-ecological Transformation or Remaining in the Niche?

JOHN THWAITES, MONASH UNIVERSITY, AUSTRALIA

Leading the Horses to Water: The SDGs in the Australian Federal System

Plenary IV: Wrapping Up and Looking Ahead

Time: 11 June, 18:00-19:30 UTC+2

Weblink: See the YouTube video [here](#)

At the time of our Symposium, five years of SDG implementation have passed, and only ten more years are left to achieve this ambitious agenda for sustainable development. The year 2022 – which will mark the fiftieth anniversary of the 1972 Stockholm conference and the thirtieth anniversary of the ‘Rio Earth Summit’ – is the next milestone in global diplomacy to accelerate efforts and adjust current programmes. What are the steps now to be taken?

CHAIR: FRANK BIERMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

SPEAKERS:

MICHELLE SCOBIE, THE UNIVERSITY OF THE WEST INDIES, TRINIDAD AND TOBAGO

SIDS Perspectives on SDG Implementation: Policy Coherence Promise and Challenges

JOHN THOMPSON, UNIVERSITY OF SUSSEX, UNITED KINGDOM

Crisis as Opportunity: Using the Global Pandemic to Catalyse a Just and Sustainable Recovery

PARALLEL PANEL SESSIONS

The following pages list all parallel panel sessions at the GLOBALGOALS2020 Symposium with all paper titles, abstracts, and names of presenters, with the name of the presenting author underlined.

All parallel panel sessions are held on 9, 10 and 11 June 2020.

For information on the weblinks, please consult the interactive conference website. All passwords for joining the virtual sessions will be shared with registered participants on 8 June 2020.

STREAM I: IMPLEMENTATION AT MULTIPLE LEVELS

Panel IMPLEMENTATION-1: International Governance

CHAIR: THOMAS HICKMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: AZITA BERAR-AWAD, GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES, SWITZERLAND

TECHNICAL FACILITATOR: SVEN BORGHART, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 9 JUNE, 16:00-17:30 UTC+2

Custodians of sustainable development: an assessment of indicator custodianship for the SDGs

MELANIE VAN DRIEL, FRANK BIERMANN, RAKHYUN E. KIM AND MARIJANNEKE VIJGE, UTRECHT UNIVERSITY, THE NETHERLANDS

The 17 SDGs aim to provide a holistic and integrated agenda covering multiple issue areas simultaneously. This example of governance through goals raises questions about its potential 'steering effect', how steering effects can be measured and how global level steering can be effective. This paper aims to add to these questions originating from the fragmentation, polycentrism and institutional complexity literature by researching the institutional novelty of indicator custodianship. At the global level custodians lead methodology development, compile, calculate and disperse data series and aggregates for their indicator and provide the annual narrative for the global progress report. Nationally, custodians coordinate with statistical systems, inspire capacity-building, data collection and ensure data comparability and quality. There are currently 44 custodian agencies from within and outside of the United Nations system, governing 232 indicators. The number of custodians per goal differs significantly, as does the number of indicators per custodian. Through a systematic document analysis, comprehensive survey and expert interviews this paper explores to what extent and under which conditions indicator custodianship can increase global level institutional cooperation and effectiveness. Applying a framework for cooperation to the 17 SDGs, this paper focuses on the institutional set-up per goal, defines and evaluates what cooperation per SDG can entail for indicator custodians, and maps current cooperation. The results of this study are used to assess the potential of indicator custodianship for a more integrated global governance approach.

A polycentric perspective on the United Nations bound to achieve the SDGs

HANNES GOEGELE, SOAS UNIVERSITY OF LONDON, UNITED KINGDOM

In 2020, the United Nations commemorates 75 years since the ratification of its founding Charter. Over recent years, critics increasingly challenge the prospect of multilateralism and the effectiveness of global bureaucracy. At the same time, academics and practitioners recognise that present-day challenges require global solutions. The United Nations has acknowledged the public mistrust and eagerly engaged on reviving its merit, displayed not least through the innovative formulation of 17 SDGs. Elaborated as part of the 2030 Agenda, these ambitious goals aim at creating an enabling, safe and sustainable environment for all people. The paper reviews the effects of global goal-setting on the United Nations development system, emphasising the inherent potential to reform its very governance to reinvigorate the organisation's global positioning and to accelerate the SDG implementation. The paper draws on Vincent and Elinor Ostrom's

studies on polycentric governance. It projects the original application of polycentricity in local administration to the current affairs of global bureaucracy in the goal-setting context. The paper analyses the inclusiveness of governance arrangements and examines the extent of polycentricity in the United Nations. The study asserts that a polycentric approach to the United Nations rules, procedures and institutions offers a provoking perspective to adversaries of global governance. The paper concludes that an increased level of polycentricity in the United Nations gives local communities the global voice promised in the organisation's founding Charter. More so, it repositions the United Nations as a transformational change agent critical to innovate and accelerate the SDGs' implementation.

Integrated sustainability and change in international organisations: The case of the International Labour Organisation

FRANCESCO S. MONTESANO, FRANK BIERMANN, AGNI KALFAGIANNI AND MARJANNEKE VIJGE, UTRECHT UNIVERSITY, THE NETHERLANDS

In the Anthropocene, the integration between socio-economic and ecological systems becomes a central sustainability governance challenge. However, have international organisations responded to this change? The existing literature on sustainability transformations in international organisations focuses on the end-results of change and tends to overlook how contextual changes such as the Anthropocene can impact the institutional and organisational level. In particular, a research gap exists about whether new global sustainability governance solutions such as the SDGs, allegedly the most advanced 'integrated' attempt, can impact international organisations approaches to sustainability. Drawing on international relations theories that emphasise the incorporation of change into the analysis of political phenomena, this paper develops an original conceptual framework with ideas, norms and institutions as the key interdependent stages of context-informed processes of change. It then uses the framework to assess sustainability-oriented change in the International Labour Organisation. The International Labour Organisation, whose original mandate already integrated social and economic development, constitutes an ideal case study to see whether the environmental dimension of sustainability is making inroads at all levels. It is also a good test case to assess the steering role of the SDGs in this direction. Focusing on the last ten years, this paper conducts a systematic qualitative content analysis of primary documentary sources, complemented with expert interviews and insights into more operational developments. It identifies promising yet uneven trends of change towards the integration of environmental elements into the International Labour Organisation's approach to sustainable development.

Panel IMPLEMENTATION-2: International Law and Norms

CHAIR: YIXIAN SUN, UNIVERSITY OF BATH, UNITED KINGDOM

DISCUSSANT: LOUIS KOTZÉ, NORTH-WEST UNIVERSITY, SOUTH AFRICA

TECHNICAL FACILITATOR: ALINA WEIß, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 16:00-17:30 UTC+2

Never-ending hunger? Norm conflicts and the implementation of SDG 2 in the global food regime complex

MAGDALENA TANZER, HELMUT BREITMEIER, ANDRÉS CHECA, JACOB MANDERBACH, AND SANDRA SCHWINDENHAMMER, JUSTUS LIEBIG UNIVERSITY GIEßEN, GERMANY

The sustainability norm cluster is contested and open to different interpretations. It comprises ecological, economic and social norms. International organisations are important for the implementation of these norms. However, SDGs are determined by norm conflicts. Do single International organisations pursue specific norm understandings? Can International organisations reach common understandings about norms? These questions become relevant in food governance, where International organisations are necessary to achieve complex goals. Despite the normative reference of SDG 2, rising hunger and the slow transformation towards sustainable agriculture indicate that the world is off track to implement SDG 2. We argue that norm conflicts among International organisations can contribute to explain this erroneous trend. Based on findings from the TANNRE research project, funded by the German Federal Ministry of Education and Research, we describe diverging norm understandings of key International organisations of the global food regime complex – FAO, UNEP, WHO and WTO. We further investigate the transformation potential of interinstitutional arrangements, which we conceptualise as fora for interaction and communication between International organisations, state and non-state actors. Connecting critical IR norm theory and regime complex theory, we introduce a framework for analysing norm conflict management in interinstitutional arrangements. Referring to structure- and agency-based approaches, we assess the impact of interplay management, authority pooling and resources, and knowledge. Drawing on interviews and document analyses, we then present results from a qualitative comparative analysis of three arrangements, in which at least two International organisations cooperate: Sustainable Food Systems Programme (FAO and UNEP), Standards and Trade Development Facility (FAO, WHO and WTO), and Codex Alimentarius Commission (FAO and WHO).

Do multilateral environmental agreements contribute to SDGs? An assessment of effectiveness through legal indicators

EMMANUELLA DOUSSIS, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, GREECE, AND ILARIA ESPA, UNIVERSITÀ DELLA SVIZZERA ITALIANA, SWITZERLAND

In recent decades, international treaties concerning directly or indirectly the environment have proliferated extensively. Despite the growing number of such agreements, and multilateral environmental agreements especially, we still know very little of their actual contribution to sustainable development. The existing literature provides little information on the effectiveness of these instruments and scholars even disagree on what effectiveness actually means so that how to measure effectiveness becomes a rather obscure exercise. This state of things leads to having this wide array of instruments not integrated in the state of the environment and/or sustainable development scorecards published regularly by states and international organisations, which report almost exclusively on scientific, economic and social data. Even when multilateral environmental agreements are taken into consideration in formal state-of-the-environment

reports, they are not the subject of in-depth evaluations. Therefore, the weight of international environmental law and its usefulness seems to be underestimated. This paper examines why it is important to integrate effectiveness issues of multilateral environmental agreements in assessing furtherance of sustainable development, in general, and implementation of SDGs, in particular, and how this could practically be achieved. It explores the methodological challenges inherent to designing a set of legal indicators (that is, quantitative measures of the performance of legal systems) that could be meaningful for multiple agreements and discusses the pros and cons of tailoring the choice of suitable legal indicators for clusters of agreements, either on a natural resources basis (for example, the agreements on the protection of watercourses) and/or on a treaty-basis (for example, the Paris Agreement).

Global goals as global norms: What goal-based governance can learn from political theory?

FERGUS GREEN, UTRECHT UNIVERSITY, THE NETHERLANDS

Many of the SDGs and associated targets can fruitfully be understood as nascent global moral norms. Global moral norms are standards of appropriate behaviour expected of states and globally significant non-state actors that came about through concerted efforts inspired by normative ideals (like justice or human rights). Because of their location at the intersection of normative ideals and real-world attempts by political actors to alter their normative environment, global moral norms invite attention from both the normative and empirical branches of political science. In this paper, I argue that goals-as-norms can usefully be evaluated from two distinct perspectives. First, they can be evaluated in the light of ideal normative political theory by asking whether and to what extent their instantiation would contribute to ideals such as basic rights. Second, they can be evaluated in the light of social scientific research on how moral and social norms emerge, spread and effect change. Combining these two sets of considerations may reveal hidden complementarities and trade-offs within individual SDGs as between their ideal-desirability and their potential to contribute to real-world change. These insights, in turn, can help practitioners to identify and prioritise the most promising goals and targets. For researchers, these insights offer numerous potential payoffs. They can be deployed to evaluate SDGs and targets, both *ex ante* and *ex post*, and to develop theoretical explanations for the (in)effectiveness of the goals and targets, informing both qualitative and quantitative empirical research.

SDGs and international environmental law: Gaps and opportunities for synergies in climate action and halting biodiversity loss

SALLA RANTALA, FINNISH ENVIRONMENT INSTITUTE, FINLAND, SHANKAR ADHIKARI, REDD IMPLEMENTATION CENTRE, MINISTRY OF FORESTS AND ENVIRONMENT, NEPAL, GABRIELA IACOBUTA, GERMAN DEVELOPMENT INSTITUTE, GERMANY, STEFANIA MINISTRINI, EUROPEAN ENVIRONMENT AGENCY, COPENHAGEN, DENMARK, AND JULIKA TRIBUKAIT, WORLD WILDLIFE FUND, GERMANY

The SDGs represent a new mode of governance through shared goals instead of legally binding international agreements. Yet, international regulatory action is required to support the goals as the challenges transcend boundaries, especially to address the drivers of the deterioration of global commons such as the atmosphere and biodiversity. Previous analysis has identified both trade-offs as well as synergies between efforts that intend to promote different SDGs. In order to harness the synergies and achieve cost-effective action, these interlinkages need to be better understood. In this paper, we focus on the interlinkages between climate action (SDG13) and halting biodiversity loss (SDG15) *vis-à-vis* the main relevant international legal instruments: the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). Through literature reviews, we investigate the shared drivers of climate change and biodiversity loss and the kind of action that would be likely to create co-benefits for SDG13 and SDG15. We analyse how CBD and UNFCCC currently address those drivers, trade-

offs and potential for co-benefits, and identify synergetic aspects currently not addressed in the legal frameworks. We also analyse the content of debates and resolutions of the United Nations Environment Assembly (UNEA) as a complementary political process to see how interlinkages between SDG13 and 15 are addressed, and how the focus differs from the legal frameworks. The results suggest broad attention to co-benefits of land-based actions by CBD and UNFCCC, but significant gaps remain, especially related to economic drivers. The increasing focus of UNEA on sustainable production and consumption suggests wide potential for co-benefits beyond SDG12, targeting also some of the key drivers of climate change and biodiversity loss.

Panel IMPLEMENTATION-3: International Organisations

CHAIR: NIENKE BOLAND, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: KRISTINA JÖNSSON, LUND UNIVERSITY, SWEDEN

TECHNICAL FACILITATOR: NIENKE BOLAND, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 14:00-15:30 UTC+2

United Nations reforms for the 2030 Agenda: The review of the High-level Political Forum on Sustainable Development

MARIANNE BEISHEIM, GERMAN INSTITUTE FOR INTERNATIONAL AND SECURITY AFFAIRS, GERMANY

The High-Level Political Forum on Sustainable Development is currently the heart of United Nations sustainable development governance. It is meant to support member states in providing ‘political leadership, guidance and recommendations’ for implementing the 2030 Agenda and SDGs. This analysis shows, however, that the High-Level Political Forum risks failing in its task as it is not sufficiently equipped for this. Succeeding the global goal-setting in 2015, the High-Level Political Forum’s major approach has been the ‘follow-up and review’ of SDG implementation through thematic and voluntary national reviews, implemented as a rather soft peer-learning mechanism. Already in 2016 member states decided to review the ‘format and organisational aspects’ of the High-Level Political Forum after the first four-year cycle, this process started in February 2020. While in-depth reforms are necessary, they would be difficult to realise in the current political context. Improvements to working methods and practices, however, are within the realm of the possible. Drawing on an analysis of the High-Level Political Forum’s current working methods and practices, the paper explores the reforms that are being discussed in New York.

The effects of the SDGs: Insights from a dynamic network analysis of 313 intergovernmental organisations

MAYA BOGERS, FRANK BIERMANN, AGNI KALFAGIANNI AND RAKHYUN E. KIM, UTRECHT UNIVERSITY, THE NETHERLANDS

The system of global governance consists of fragmented international institutions. With the adoption of the SDGs in 2015, however, an unprecedented trust has been placed in the capacity of global goals to bring together these separate international institutions operating in silos. Yet little is known about goal-setting as a global governance mechanism and its effects on existing governance networks. Do the SDGs facilitate integration among intergovernmental organisations? To shed light on this question, this paper assesses and explains how the network of intergovernmental organisations has evolved in its structure before and after

the advent of the SDGs. More specifically, a network model of 313 intergovernmental organisations is constructed using their websites and hyperlinks between 2012 and 2018. From this model, the paper makes three main assessments. Firstly, the changing degree of overall network fragmentation over time is analysed. Secondly, a systematic comparison is made of the network structures between different SDG domains. Lastly, integration across the social, economic and environmental dimensions of the SDGs is assessed. Data is collected through a custom-made web crawler that retrieves hyperlink networks from archived websites of intergovernmental organisations. This novel method has never been used in global governance research, and our study demonstrates its potential to significantly advance the field. This paper makes a significant contribution to our understanding of the effects of global goals on the structure and dynamics of global governance.

The role of international organisations in achieving the SDGs

DAVID KUHN AND RAKHYUN E. KIM, UTRECHT UNIVERSITY, THE NETHERLANDS

The SDGs present a new approach to global governance dubbed as ‘governance through goals’. In contrast to more hierarchical forms of steering, the SDGs with its specific characteristics open the field up for novel constellations of private and public efforts, bottom-up initiatives or networks on, for example, the city level. However, the specific contribution of international organisations to the implementation of the SDGs remains largely unknown. Here we focus on a specific international organisation, namely the United Nations Economic Commission for Europe, and examine its capacity to steer the behaviour of national governments towards implementing the SDGs. We find that the United Nations Economic Commission for Europe is able to exercise normative and orchestrated influence by facilitating the establishment of national environmental standards by enlisting intermediary actors such as the Organisation for International Economic Relations, the International Office for Water or universities. In line with the increasing theoretical and empirical rejection of understanding international organisations as pure reflectors of state’s interest, our analysis confirms the potential and autonomous capacity of international organisations in advancing national policies. Subsequently, we call for further research on the potentially significant role of international organisations as orchestrators for the SDGs.

Sustainable development agenda setting and orchestration: The leading role of the United Nations

MONTSERRAT KOLOFFON ROSAS, VRIJE UNIVERSITEIT AMSTERDAM, THE NETHERLANDS

The United Nations currently plays a central role on the sustainable development front at the global governance level. On the one hand, it fulfils the agenda setting role, with its 2030 Agenda, including the SDGs (and previously the Millennium Development Goals). On the other hand, it can be considered an ‘orchestrator of orchestrators’ (Bernstein 2017) with the responsibility to indirectly advance the implementation of this agenda. Despite the common perception of orchestration as a ‘soft’ governance strategy, I argue that it is a decisive role, which combined with the agenda setting, makes the United Nations the main actor in leading the efforts towards sustainable development. As a leader, the United Nations has the responsibility to engage in a continuous improvement process to fulfil these important roles to the best of its capacities. The contribution of this work is twofold. First, with the aim of laying out the procedural development within the United Nations, a comparison is made between the ‘agenda-setting’ process of the Millennium Development Goals and the SDGs. Specifically, I focus on identifying the decisive factors for the goals to be included on either of the two sets of goals. Secondly, a systematic assessment of the United Nations orchestration performance since the SDGs were launched is conducted, based on the four conditions for a successful orchestration outlined by Steven Bernstein. Areas of opportunity are discussed

to improve the United Nations' effectiveness at guiding all involved actors towards the achievement of the SDGs.

Panel IMPLEMENTATION-4: Implementation at National Level [Part 1]

CHAIR: CATHY OKE, UNIVERSITY OF MELBOURNE, AUSTRALIA

DISCUSSANT: KONAR MUTAFOGLU, INSTITUTE FOR ADVANCED SUSTAINABILITY STUDIES, GERMANY

TECHNICAL FACILITATOR: JANA BIRNER, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 11:00-12:30 UTC+2

Towards the SDG 7 targets: Business challenges in geothermal energy sector in Indonesia

AKMILATUL MAGHFIROH, GADJAH MADA UNIVERSITY, INDONESIA, YANUARDI YANUARDI, UTRECHT UNIVERSITY, THE NETHERLANDS AND YOGYAKARTA STATE UNIVERSITY, INDONESIA, AND AHMAD FAUZI PURWANDONO, UTRECHT UNIVERSITY, THE NETHERLANDS AND GADJAH MADA UNIVERSITY, INDONESIA

Increasing investment in the renewable energy sector is one of the targets of SDG 7. Despite having 40 percent of the world's geothermal potential, Indonesia remains heavily dependent on fossil fuel and its installed geothermal power capacity is less than 7 percent of its potential. The government has set a high target to increase energy mix from geothermal energy; however, the investment progress seems halted. This paper elaborates on the extent to which business encounters challenges to operate in Indonesia to support the achievement of the target, particularly on the geothermal energy sector. This research scrutinises data from media analysis and interviews related to the geothermal energy sector in Indonesia. The findings of hindrance confronted by business actors are geological risks during exploration and production, resistance from local government, NGOs and communities, lengthy and costly license process, rent-seekers, price competition with coal and feed-in tariff in the monopolised market. Although the Indonesian government has attempted to issue a set of policies to overcome these obstacles, this effort has not yet successfully achieved the target.

Using high-tech, high-touch healthcare to achieve multiple SDGs: A public-private research partnership with mine houses accelerate SDGs in South Africa

ANNA SUSANNA MALAN, R. BENNETT, TIAAN DE JAGER, JANNIE HUGO, AND TESSA MARCUS, UNIVERSITY OF PRETORIA, SOUTH AFRICA

A threat to achieving the SDGs by 2030 is having vertical programmes that are implemented in silos, and of trade-offs between different goals. The community-oriented primary care research unit of Pretoria University's Faculty of Health Sciences is currently researching a holistic approach to universal health coverage that has the potential of contributing to as many as 8 SDGs. The initiative is part of a broader joint development initiative between the two large mine companies of Anglo American and Exxaro Resources. They have decided to collaborate to optimise their development requirements and to reduce duplication, since they often share communities. One of the selected development initiatives is to implement a model of public healthcare that demonstrates how universal health coverage can be achieved when the government service is augmented with private sector contributions. The model is currently implemented as a 'living lab' in the Mogalakwena mine area in South Africa, with 180,000 people. The elements of the community-oriented primary care model include: mapping and modelling the community's disease burden

and expected facility use; allocating the existing cadre of healthcare workers to visit each household; training the healthcare workers to register and refer patients through a mobile device ICT platform and to become information providers of health, proper water use and sanitation, healthy lifestyles and improved diet and nutrition. The research has already shown positive results in health, nutrition and social indicators. The objective now is to use the ICT platform and healthcare workers to optimise the linkages between the 8 SDGs, and to track the number of cross-cutting indicators. The latest results are shared with conference participants.

Proposal for a national blueprint framework to monitor progress on water-related SDGs in Europe

BRYONY ESSEX, STEF KOOP AND KEES VAN LEEUWEN, KWR WATERCYCLE RESEARCH INSTITUTE AND UTRECHT UNIVERSITY, THE NETHERLANDS

The 17 SDGs underpinned by 169 targets present national governments with huge challenges for implementation. We developed a proposal for a National Blueprint Framework with 24 water-related indicators, centred on SDG 6 (clean water and sanitation for all), each with a specific target. We applied the National Blueprint Framework to 28 EU member states and conclude that: (1) The current SDG 6 indicators are useful for monitoring progress towards water-related targets, but their usefulness can be improved by focusing more on their practical implementation. (2) The extension of SDG 6 with complementary indicators (for example, for the circular economy of water) and quantitative policy targets is urgently needed. This will benefit the communication process and progress at the science-policy interface. (3) SDG indicators can be improved in a specific, measurable, achievable, relevant, and time-bound manner and by setting clear policy targets for each indicator, allowing for measuring Distance-to-Targets. This allows country-to-country comparison and learning and accelerates the SDG implementation process. (4) We propose 24 water-related indicators centred on SDG 6, with complementary indicators including quantitative policy targets. The approach is doable, easily scalable, and flexibly deployable by collecting information for the EU-28. (5) Main gaps in the 28 EU member states are observed for water quality, wastewater treatment, nutrient and energy recovery, as well as climate adaptation to extreme weather events (heat, droughts and floods). (6) The framework was less successful for non-OECD countries due to lack of data and EU-centric targets for each indicator.

Panel IMPLEMENTATION-5: Implementation at National Level [Part 2]

CHAIR: MELANIE VAN DRIEL, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: DIMITRA MANOU, ARISTOTLE UNIVERSITY OF THESSALONIKI, GREECE

TECHNICAL FACILITATOR: BRANDON WHITLEY, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 16:00-17:30 UTC+2

Constructing voluntary national reviews on the SDGs. A comparative country study

MAGDALENA BEXELL AND KRISTINA JÖNSSON, LUND UNIVERSITY, SWEDEN

The 2030 Agenda is a rewarding study object for research on reporting, review and evaluation in policy-making processes at the intersection of global and national sustainable development politics. Ideally, review not only serves to provide an assessment of current levels of goal fulfilment and direction for future

priorities, but also to enable political accountability between decision-makers and citizens by making government performance more transparent. While research on the role of review and reporting usually focuses either on the international or the domestic setting, this paper explores the role of international peer reporting for domestic settings. More specifically, we ask: how do Voluntary National Reviews (VNR) for the UN High-level Political Forum (HLPF) influence accountability in national policy-making processes on the 2030 Agenda? We contribute two qualitative case studies of national level VNR-processes, namely those of Sweden in 2017 and Ghana in 2019. The two countries display great variation with regard to political system, degree of socio-economic development, role in international development cooperation and statistical capacity. The paper finds that VNR preparations accelerated domestic policy translation of the SDGs and enhanced the power of statistics in policy-making. Presentations of the VNR at the HLPF had strong symbolic dimensions with regard to conveying an ambitious inclusive approach to the SDGs. The impact of VNR follow-up on accountability relations vary due to country characteristics but overall, VNR processes have strengthened horizontal accountability relations rather than vertical accountability relations between citizens and governments.

Assessing the impact of the SDGs in Canada

BRIANNA BOTCHWEY, UNIVERSITY OF TORONTO, CANADA

During his address to the United Nations in September 2017, Canadian Prime Minister Justin Trudeau argued that the 'SDGs are as meaningful in Canada as they are everywhere else in the world', committing to implement them both at home and abroad. This paper provides an assessment of Canada's implementation of the SDGs, outlining the current institutions, policies and practices in place designed for SDG implementation. Overall, it finds that Canada has taken the Agenda seriously but more work remains to be done. It also identifies several domestic political drivers of Canada's response to the SDGs. Notably, the roll out of the SDGs in 2015 coincided with the ushering in of a new Canadian government wanting to do sustainable development and foreign policy differently. This paper argues that the SDGs fit neatly with the new government's ambitions for itself. In addition to this high-level commitment and SDG fit with the government's domestic political agenda, other important factors include concerns of reputation, pre-existing goal-based implementation architectures in the government and the role of the Supreme Audit Institution. Overall, this study provides useful insights into the political drivers of SDG implementation, both domestic and international, of an advanced economy.

Building policy coherence to what ends? Institutional arrangements for the SDGs in the Netherlands

ABBIE YUNITA, FRANK BIERMANN, RAKHYUN E. KIM AND MARJANNEKE VIJGE, UTRECHT UNIVERSITY, THE NETHERLANDS

As an integrated and universal agenda, the SDGs present policy coherence as essential to the attainment of the SDGs. However, the pursuit of policy coherence preceded the advent of the SDGs and in many instances remains largely elusive, despite procedural and organisational reforms to improve coherence. How then, and to what extent have the SDGs influenced the procedural and substantive attributes of policy coherence, and to what effects? This paper addresses these questions through a case study of the Netherlands. Covering the period between 2012 and the present, it first traces the processes through which certain institutional arrangements materialised for the SDGs. The analysis focuses on four institutional arrangements: (1) high-level National SDG Coordinator; (2) the network of SDG Focal Points embedded in each ministry; (3) the 'SDG Check'; and (4) the Wellbeing Monitor. Having examined these new mechanisms and instruments in detail, the paper then explains how they work and interact in practice. More specifically, it specifies how and whether these institutional arrangements shape the content of policy: the selection of

issues that gain saliency, the construction of policy imperatives, and the integration of individual goals. The paper advances our understanding of how the SDGs influence institutional configuration and interaction in the context within which they operate. This is instructive to discern whether procedural change can steer substantive policy change.

Panel IMPLEMENTATION-6: SDG Impacts on National Policy Processes

CHAIR: CLARA BRANDI, GERMAN DEVELOPMENT INSTITUTE, GERMANY

DISCUSSANT: MARIANNE BEISHEIM, GERMAN INSTITUTE FOR INTERNATIONAL AND SECURITY AFFAIRS

TECHNICAL FACILITATOR: MATTEO SPINAZZOLA, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 11:00-12:30 UTC+2

Global governance through goal-setting: A meta-analysis of the effects of the Millennium Development Goals

THOMAS HICKMANN, FRANK BIERMANN, MATTEO SPINAZZOLA, CHARLOTTE BALLARD, MAYA BOGERS, OANA FORESTIER, AGNI KALFAGIANNI, RAKHYUN E. KIM, FRANCESCO S. MONTESANO, TOM PEEK, CAROLE-ANNE SÉNIT, MELANIE VAN DRIEL, MARJANNEKE VIJGE AND ABBIE YUNITA, UTRECHT UNIVERSITY, THE NETHERLANDS

The Millennium Development Goals, agreed upon by the United Nations member states at the Millennium Summit for the period from 2000 to 2015, were an important precursor to the current SDGs. With the Millennium Development Goals, the international community reinforced its approach of governance through goals that has now become dominant in the 2030 Agenda for Sustainable Development. Yet, what were the actual effects of the Millennium Development Goals in terms of policy outcomes? To what extent have they been achieved, in what areas, in which countries, and most importantly – how can we explain this impact and underlying variations? Answers to these questions provide crucial information for the future success of the SDGs. Based upon an original database of scholarly articles published between 2009 and 2018, the paper identifies different hindering and enabling factors for the implementation of the Millennium Development Goals in national jurisdictions. The paper contends that the Millennium Development Goals had some effect on some countries under some circumstances. Drawing on our meta-analysis, we formulate a number of policy recommendations to help adjust existing political frameworks and processes for attaining the SDGs and strengthen this newest version of governance by goal-setting.

Assessing the impacts of SDGs: The case of fossil fuel subsidy reform

JAKOB SKOVGAARD, LUND UNIVERSITY, SWEDEN; AND HARRO VAN ASSELT, UNIVERSITY OF EASTERN FINLAND, FINLAND, AND UTRECHT UNIVERSITY, THE NETHERLANDS

The policies targeted by the SDGs were subject to frequent changes already before the adoption of the goals in 2015, and this will continue to be the case in the future. Such changes can be driven by domestic factors (for example, civil society acting as norm entrepreneurs) as well as by international factors (for example, international regimes). This raises the vexed question of how to isolate the effects of the SDGs from other factors driving policy change. We develop a framework for studying the influence of SDGs on domestic fossil fuel subsidy reform. In virtually all countries, fossil fuels are subsidised, e.g., through price controls, tax breaks and the provision of infrastructure. Existing research has shown that fossil fuel subsidy reform has hitherto mainly been driven by domestic (economic) factors, with pressure from international economic

institutions often playing an important subsidiary role. International environmental institutions have traditionally not paid much attention to these subsidies. Yet with SDG 12.c committing all countries to undertaking efforts to rationalise inefficient fossil fuel subsidies, this dynamic may change. To study the influence of SDG 12.c, our framework first identifies major changes to fossil fuel subsidies drawing on data from the OECD as well as civil society sources. Second, we outline the pathways through which SDG 12.c may induce major policy change to fossil fuel subsidies, specifically norm diffusion, learning from other countries or reputational costs. An illustrative case study of Indian fossil fuel subsidy reform underscores the contribution of our framework and its usefulness for other scholars studying the impact of the SDGs (and other global goals) on domestic policy.

The national development planning after the SDGs: Implications of global goal-setting towards national policymaking processes

MAHESTI OKITASARI AND TAREK KATRAMIZ, UNITED NATIONS UNIVERSITY, JAPAN

The SDGs recognise that in their implementation countries need to 'nationalise' the global goals in national deliberation processes. This creates an opportunity for the SDGs to promote national goal-setting and associated national planning initiatives. From the perspective of national planning, there are high possibilities for the SDGs to influence national development planning in multiple ways, including through promoting systematic planning, increasing the application of evidence-based planning and policy choices, and improving good-quality data. Accordingly, recent research pointed out that there is a growing trend of countries returning towards national development planning as a catalyst for achieving the SDGs. However, while there are renewed needs in understanding the governance for the SDGs implementation, surprisingly, there is limited literature on the ways the SDGs potentially stimulate new directions of national development planning. This paper looks at the nationalisation of the global goals from the perspective of national development planning. It aims to identify the potential impacts of the SDGs on behaviour that influence national development policymaking. The paper generates an understanding of how the nationalisation of the SDGs exercises affect national development plan and associated initiatives. Based on an analysis of multiple national development plans produced after 2015 in the Asia-Pacific and Middle East and North Africa regions, it examines in which ways the SDGs as global goal-setting influence national development planning ideologically and operationally, whether through technical communicative, collaborative rationality redefining values, or creating a new planning paradigm. By doing so, the paper contributes to the literature on the impacts of global goal-setting as a mode of governing national development planning.

Panel IMPLEMENTATION-7: The Role of the Private Sector in SDG Implementation

CHAIR: KATHARINE RIETIG, NEWCASTLE UNIVERSITY, UNITED KINGDOM

DISCUSSANT: MEHWISH KAREEM, SHAOOR TRAININGS AND CONSULTANCY, PAKISTAN

TECHNICAL FACILITATOR: MAXIMILIEN GUIAN ILLANES, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 11:00-12:30 UTC+2

The emerging purpose ecosystem: Innovative private sector agency in earth system governance and the SDGs?

ROB RAVEN, MONASH UNIVERSITY, AUSTRALIA; FRED DAHLMANN, WARWICK BUSINESS SCHOOL, UNITED KINGDOM; WENDY STUBBS, MONASH UNIVERSITY, AUSTRALIA; AND JOAO PORTO DE ALBURQUERQUE, WARWICK INSTITUTE OF GLOBAL SUSTAINABLE DEVELOPMENT, UNITED KINGDOM

The private sector has long been seen to play a critical role in addressing the challenges of the Anthropocene and providing potential solutions to address the SDGs. Yet there are questions whether businesses can address the complexities involved in interconnected sustainability issues. There are also concerns that private sector engagement with the SDGs simply reflects new efforts to enhance social legitimacy through ‘SDG- or rainbow-washing’. A myriad of intermediaries, initiatives and organisations are emerging that aim to drive wider systems change by advocating and advising businesses to reconsider and broaden their fundamental ‘raison d’être’. Their focus is to create ‘purpose-driven businesses’ which fundamentally integrate social and environmental objectives into their organisational purpose. We conceptualise this emerging network as the ‘Purpose Ecosystem’. Actors within this purpose ecosystem seek to create favourable framings, incentives, systems and infrastructures to support the development of purpose-driven businesses; connect and bring together purpose-driven actors from multiple areas; and, educate new and potential businesses to be social and environmental ‘change-makers’. We argue that this Purpose Ecosystem represents an innovative form of governance which may have the potential to drive wider purposeful change by endorsing and accelerating action aligned with achieving the SDGs. Conceptually, we situate our paper within the broader research agenda on earth system governance, while also drawing on the established literatures on management and sustainability, to inform a critical view and assessment of the Purpose Ecosystem, and to provide new research questions.

Understanding learning in Asian development banks: a goals-based governance

JECEL CENSORO, KATHARINE RIETIG, AND GRAHAM LONG, NEWCASTLE UNIVERSITY, UNITED KINGDOM

The SDGs – like the Millennium Development Goals – lack formal rules and a legally binding framework, instead relying on soft governance via orchestration, partnerships and systematic monitoring. A gap remains on how the use of goals can generate organisational change through learning and on roles different organisations play in the implementation of the goals. This paper addresses these questions through a case study of the Asian Development Bank, a regional organisation that plays a key part in driving state policies. Using a conceptual framework of Multi-Level Reinforcing Dynamics and three types of learning (factual, experiential and constructivist learning), this research develops a distinctive account of how the goals influence the Asian Development Bank and the role the bank and its staff play in implementing the SDGs. It finds that first, development of policy instruments such as plans and strategies are influenced by the goals more than the project design and implementation. Second, function and position of the individuals are key factors for learning. Top management have deeper beliefs; hence they serve as policy entrepreneurs. Most staff of the organisation mainly exercise experiential learning. This means they adhere to the goals for compliance rather than the goals influencing their beliefs and decisions. Third, though main factors behind

the work of the Asian Development Bank on the goals are external – availability of funds, return of investment, reputational risk and peer pressure – there have been internal changes (beliefs and attitudes) in how this Multi-Level Reinforcing Dynamics conducts development. Clearly, there are changes in the organisation since 2000 as evidenced by an increase in social sector investment, shift to clean energy and further push for gender equality in projects. However, these are not necessarily a result of the goals.

The role of voluntary sustainability standards for the SDGs

CLARA BRANDI, KATHARINA BISSINGER, GERMAN DEVELOPMENT INSTITUTE, GERMANY; MATTEO FIORINI, EUROPEAN UNIVERSITY INSTITUTE, ITALY; AND PHILIP SCHLEIFER, UNIVERSITY OF AMSTERDAM, THE NETHERLANDS

The SDGs are to align the efforts of public and private actors and to further the integration of governance instruments around their ambitious agenda. While there is a burgeoning literature on transnational governance interactions, we have little systematic knowledge about the degree of public-private complementarity in this policy domain. To address this gap, this paper uses an original dataset to explore the intersections of voluntary sustainability standards and the 2030 Agenda for Sustainable Development. In a first step, we investigate the overlaps between voluntary sustainability standards requirements and SDG targets by identifying which SDG targets are covered by voluntary sustainability standards and which are not. Building on a mapping of 800 voluntary sustainability standards requirements against the 17 SDGs and their 169 targets, we generate indicators for overlaps between SDGs and voluntary sustainability standards both at the global and country-sector level. Taking a closer look at the overlaps between requirements of voluntary sustainability standards and SDG targets, we create a complementarity indicator and describe its variation across countries and industry sectors. The result is a much more comprehensive and refined analysis of these public-private intersections than seen in previous studies. In a second step, we explore the potential of voluntary sustainability standards to serve as an implementation mechanism for the SDGs. In a ‘most-likely’ case setting, we zoom into a subset of well-established voluntary sustainability standards. Drawing on regime theory, we analyse data linked to their institutional design, institutional context, and policy uptake to gain a better understanding of the potential effectiveness and role of these programmes for the SDGs.

Panel IMPLEMENTATION-8: Implementation at Subnational Level

CHAIR: JÖNSSON, KRISTINA, LUND UNIVERSITY, SWEDEN

DISCUSSANT: BEXELL, MAGDALENA, LUND UNIVERSITY SWEDEN

TECHNICAL FACILITATOR: FENNA VOGELZANG, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 11:00-12:30 UTC+2

Government workers perception of policy coherence in the implementation of the post-2015 Agendas: The case of Mexico

MAR MOURE AND SIMONE SANDHOLZ, UNITED NATIONS UNIVERSITY, JAPAN

Some of the main documents resulting from the 2015 momentum are the SDGs, the Paris Agreement, the Sendai Framework and the New Urban Agenda. Despite their shared vision of global sustainable development, with several overlapping goals and targets, the agendas are often treated along sectoral boundaries, leading to highly branched governance structures, budgets, and implementation. Underusing

their potential for synergies is not only a burden for governments due to redundancies and duplicated operative costs but can also hinder collective goals and lead to contradictory outcomes. Despite growing attention on policy coherence, existent literature fails to explain why despite the widespread recognition of its theoretical value, it is in reality so hard to achieve. Based on a literature review and fieldwork, our research focuses on the perception of the people in charge of operationalising the agendas, taking Mexico as a case study. Results challenge a single-lensed approach to policy coherence, which tends to overlook the systems complexity by focusing on a binary coherence/incoherence analysis. Indeed, participants were concerned not only with the costs of incoherence and benefits of coherence, but also with the costs of setting up a long-lasting structure for coherence and the advantages of continuing business-as-usual. The typology emerging from the fieldwork provides a more differentiated picture of drivers and manifestations of (in-)coherence than what was found in the literature, considering for example psychological, organisational and political factors. It also distinguishes among perceived impacts, that is, who bears the costs in each scenario. Finally, the study extracts potential entry points for coherence.

Localising the SDGs at village level: Best practice in Gorontalo Province, Indonesia

EDUART WOLOK, FUNCO TANIPU, BOBBY R. PAYU, AND ZULKIFLI TANIPU STATE UNIVERSITY OF GORONTALO, INDONESIA

In the context of Indonesia with its vast area and thousands of islands and villages, accomplishing the 2030 targets will be challenging without a holistically integrating development at the village level. Since the democratisation and decentralisation that have placed villages as the centre of development, villages have now become autonomous and received a particular budget for their development under the mandate of the Law No. 6 in 2014. On the other hand, the framework of the SDGs in Indonesia has been only at the provincial and city/district level, not at village level in terms of planning and implementation of development schemes. Therefore, it requires a systematic and contextual framework of SDGs at villages to be synchronised with the targets at national and global levels. Through the programme of localising the SDGs at the village level, State University of Gorontalo has formulated SDGs strategies and frameworks at the village level in Gorontalo Province, to ensure that the focus of village development is in line with the SDGs target to strengthen villages' capacity. We have strengthened the commitment by assisting 30 villages to integrate the SDGs into their development plan and providing the Key Performance Indicators to measure the implementation of SDGs at village level as the benchmark in Gorontalo province. Technically, since the problems of poverty, hunger, environment, social justice, education, and health in Indonesia mostly occur in the villages, localising SDGs at Village level is formulated to 'bypass' and to accelerate the achievement of SDGs in Indonesia.

Governing the SDGs at local level: Experiences of SDGs future cities in Japan

HIROMI MASUDA, KANAKO MORITA, MAHESTI OKITASARI, AND TAREK KATRAMIZ, UNITED NATIONS UNIVERSITY, JAPAN

Local level implementation is a key to achieving the 2030 Sustainable Agenda for Sustainable Development, as shown in the 2019 SDGs Summit. However, it is not clear how localisation of the SDGs occurs and how local governments mainstream the SDGs into their policies. This can be explained by the lack of information on localisation within Voluntary National Reviews, and the limited number of leading initiatives with Voluntary Local Reviews that describe the initial stage of SDGs implementation at the local level. This paper focuses on how local governments have mainstreamed SDGs in policy making through cases in Japan. Recent research on Voluntary National Reviews has shown that national governments have established SDGs implementation schemes including institutional coordination mechanisms and new legal systems. The paper identifies the progresses on governance changes, challenges and opportunities in SDG implementation at

local level through analysis of two cities designated as SDGs Future Cities in Japan. Besides document analysis, the findings of this paper are based on semi-structured interviews with policymakers and local stakeholders. Our analysis of local governance changes in two cases finds that while both local governments developed coordination mechanisms and improved the levels of collaboration with multi-stakeholders, there were several differences observed in some aspects including how local governments mainstream SDGs into existing policies and what kind of policy tools they created for a new governance. It provides insights into how local contexts could influence governance changes in localising the SDGs.

A strategic framework towards localisation of the SDGs: Evidence from Bangladesh

MD. SUJAHANGIR KABIR SARKAR, UNITED NATIONS UNIVERSITY, JAPAN AND PATUAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY, BANGLADESH

To speed up the implementation of the SDGs at national level, policymakers and practitioners are currently emphasising the localisation of SDGs where local government could play a crucial role. This study explores the existing performance of the local stakeholders involved in local adoption of SDGs and develops a strategic framework for localising SDGs for effective implementation. The paper is based on semi-structured interviews with multiple stakeholders working on different SDGs at the local level in three different Districts in Northern Bangladesh. A SWOT (strength, weakness, opportunity and threats) analysis of all possible stakeholders was carried out as it is one of the useful techniques for mapping stakeholders which helps to address weaknesses and threats, and promote the potential use of strengths and opportunities among them. Moreover, this study assesses local capacity by exploring stakeholder's knowledge and participation, current role, existing support mechanism, possible needs and strategies applied for SDGs. The findings reveal higher local capacity for familiarity of local problems and environment, and existence of potential stakeholders, and lower capacity for knowledge and resources, fund utilisation and exclusion. The study outlines a strategic framework to increase local capacity and proposes an innovative approach for the localisation of the SDGs under the leadership of local government. Therefore, it recommends promoting local government through reward and recognition for initiating innovative approach towards accelerating the achievement of SDGs at local level.

Panel IMPLEMENTATION-9: Ports and SDGs implementation

CHAIR: ANTONIS MICHAIL, WORLD PORTS SUSTAINABILITY PROGRAMME

DISCUSSANT: ANTONIS MICHAIL, WORLD PORTS SUSTAINABILITY PROGRAMME

TECHNICAL FACILITATOR: NIENKE BOLAND, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 9 JUNE, 16:00-17:30 UTC+2

Putting SDGs to work in ports: Institutional and governance arrangements

HARRY BARNES-DABBAN, PORTS ENVIRONMENTAL NETWORK AFRICA, THE NETHERLANDS

The SDGs focus on involving individuals and sectors to build a more sustainable, safer and prosperous planet for all humanity. Ports are known to be one of the most polluting sectors due to their nature and activities. Many ports in recent times, however, are beginning to develop and implement more sustainable solutions. But these solutions remain fragmented without wide acceptance and adaptation among stakeholders in a level playing field to ensure effective realisation. Many scholars and international organisations have offered

a variety of concepts, discourses, theories, regulations, initiatives and tools for the sustainable development of ports. However, how these are aligning the development and implementation of sustainable port solutions in effective governance arrangements to steer ports towards sustainable futures and achieving SDGs is less clear. The objective of this paper is to explore institutional dynamics within which port sustainability solutions are being developed and implemented through actor interactions across multiple levels of society using existing concepts of global environmental governance and politics – agency, architecture, adaptiveness, inclusiveness, and coherence – as an analytical framework.

Achieving target SDG 14c: The role of the International Maritime Organisation in port-state treaty implementation

NELSON COELHO, AALBORG UNIVERSITY, DENMARK

The implementation of international law is a target of SDG 14, which aims at enhancing the conservation and sustainable use of oceans and their resources. The target cites paragraph 158 of The Future We Want, under which United Nations Member States committed to abide by international law in achieving that goal. Jurisdiction exercised at port is key in that respect, as vessels are subject to control by authorities of their compliance with applicable international rules and standards. Port state jurisdiction applies to issues ranging from protection and preservation of the marine environment from ship source pollution to the prevention, deterrence and elimination of illegal, unreported and unregulated fishing. Port states have adopted regional agreements on port state control and have adopted port state measures under regional fisheries management organisations. These instruments seek to ensure a level playing field in the implementation of international treaties and are thus a means to achieve SDG target 14c. This notwithstanding, there is no international coordination of port state jurisdiction, and thus the capabilities and actual engagement vary from region to region, without any actual binding obligation concerning implementation. This paper shall analyse this question by focusing on current attempts from the International Maritime Organisation to expand its regulatory reach into the governance of ports. The objective of this research is to highlight how this United Nations agency could fulfil its responsibilities with respect to the SDG in that role, all the while remaining tied to the existing international legal and institutional framework.

Actions and motivations of ports towards the implementation of the SDGs

MAURICE JANSEN, ERASMUS UNIVERSITY ROTTERDAM, THE NETHERLANDS

Ports and port cities play a pivotal role in the sustainable development of the regions, offering favourable locations for industry and accessibility to world markets. While port industrial activities have been reactive to pressure from stakeholders, ports have adopted inclusive strategies vis-à-vis stakeholders in more recent years. Around the world port authorities are aligning their ambitions towards their contribution to the SDGs, such as the World Port Sustainability Programme for port authorities and AIVP2030 for port-cities. The aim of this paper is to assess to what extent ports have contributed to the implementation of the SDGs. The analysis is based on a content analysis on project portfolios in which port and city authorities demonstrate leadership in sustainable development. The results indicate that the contribution of port and port city authorities are generally motivated to ‘do no harm’, rather than their motivation to ‘do good’. Furthermore, the findings show the linkages between projects with the goals is rather ambiguous. Directions are given towards a methodology for a stronger link between (monitoring) business strategies with the implementation of inclusive strategies in order to contribute to the SDG goals and targets.

Panel IMPLEMENTATION-10: Implementation at Local Level

CHAIR: OKKA LOU MATHIS, GERMAN DEVELOPMENT INSTITUTE, GERMANY

DISCUSSANT: ZANE ŠIME, ASSOCIATION OF POLAR EARLY CAREER SCIENTISTS

TECHNICAL FACILITATOR: BRANDON WHITLEY, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 14:00-15:30 UTC+2

Brazilian University Network on the 2030 Agenda: Challenges and opportunities on territorialising the SDGs in Brazil

THIAGO GEHRE GALVÃO, UNIVERSITY OF BRASILIA, BRAZIL; RAQUEL CABRAL, SÃO PAULO STATE UNIVERSITY, BRAZIL; AND RAFAEL LUCYK MAURER, FEDERAL UNIVERSITY OF PAMPA, BRAZIL

Higher public education in Brazil is formed by universities that act in education, research and extension. The objective of this paper is to understand and critically evaluate the possibilities of implementing the 2030 Agenda and the SDGs in Brazil through a network of dedicated universities using the 17 SDGs as a compass to calibrate research, teaching and outreach actions and activities. It is known that norms emanating from the global scope end up circulating at different levels of territoriality. In this sense, they also bring challenges to the University, which requires understanding the process of implementing the objectives and goals contained in the 2030 Agenda, as well as their institutionalisation in social structures and practices at University daily life. The paper reflects on a strategy created at University of Brasilia and enhanced by a network with UNESP University and UNIPAMPA, based on methodology of mapping research, teaching and outreach actions already underway that dialogue with the 2030 Agenda. Part of research is conducted based on Qualitative Content Analysis, in order to assist in deciphering qualitative material systematically from the classification into categories and frameworks; ensuring the possibility of constructing a sense about the object of analysis by reading and analysing the sources; allowing to draw descriptive and analytical inferences about present values, perceptions and beliefs. Drawing from a hybrid of Public Policy, Communication and International Relations theoretical perspectives the paper is based on research of projects developed in institutions involving SDG and on empirical material from surveys applied to teachers and students and with university staff involved at some point with the 2030 Agenda.

An experience of SDGs localisation: Between evolutionary governance and participatory action research

LILIANA DIAZ RAMIREZ, UNIVERSITÉ LAVAL, CANADA

The proposed communication presents the process carried out by the Hydro-Québec Institute in environment development and society of Université Laval, to support local communities and organisations from Québec (Canada) in the integration of SDGs into their actions, from a perspective based on these two approaches. As a consensus-based framework of global action, Agenda 2030 should accelerate the achievement of a more sustainable society by facilitating coordination between actors and cross-sectoral coherence. This programme is also a referent for civil society organisations and local communities in planning their actions and in developing monitoring tools. In addition, it represents a source of legitimisation for citizen claims about the minimum social and environmental economic thresholds to be respected. Finally, because of the preponderance of the use of big data and digital tools for diagnosis and monitoring, many technical, ethical and social questions are associated with the implementation of this programme. All of these dimensions imply major transformations in governance to put in place, which provide as many opportunities for successful ecological transition. This multi-disciplinary, multi-sectoral multiscale and action-oriented nature of issues involved requires adapted approaches for the production and transfer of

knowledge. The evolutionary governance perspective (Beunen et al. 2014) provides an inspiring framework for understanding interactions between actors, sectors and decision scales involved in SDGs. In addition, the urgency of the challenges requires that researchers adopt active postures to favour the desired changes. The participatory action research approach (Kemmis et al. 2014) offers epistemological and ethical keys to clarify the role of researcher.

Governance through global goals ‘on the ground’: Governing practices for implementing the SDGs in Swiss cantons

BASIL BORNEMANN AND MARIUS CHRISTEN, UNIVERSITY OF BASEL, SWITZERLAND

The Agenda 2030/SDGs, a paradigmatic case of ‘governance through global goals’, aims to trigger activities of virtually all types of societal actors at different levels to promote joint action towards a great sustainability transformation. Governments at different levels are in a special position to implement the SDGs. As ‘meta-governors’, they are to shape a variety of societal governance arrangements and networks in the direction of Agenda 2030 as a whole. To this end, governments must translate the SDGs into their respective governing contexts and integrate them into their action strategies, which are shaped by established institutions, ideas, identities and interactions. On the one hand, these global goals are likely to challenge existing orientations and governance practices and require their adaptation. On the other hand, global goals offer additional transformation levers that government actors can consciously use to promote their strategies. This paper aims to better understand why, how and with what consequences government actors integrate Agenda 2030 and the SDGs ‘on the ground’ into government practice. With a focus on several Swiss cantons, we reconstruct both the challenges and the opportunities related to the SDGs from the perspective of the administrative actors working towards the implementation of these goals in the cantonal administration. How do they perceive the goals and the associated challenges and opportunities – and how do they address them? How do they translate these goals into existing governance contexts? How and why do they (not) influence existing government practice? By addressing these questions, we gain deeper insights into the mechanisms, prospects, and limitations of governance through global goals ‘on the ground’.

Panel IMPLEMENTATION-11: Individual Action and Values

CHAIR: BASIL BORNEMANN, UNIVERSITY OF BASEL, SWITZERLAND

DISCUSSANT: SANDRA SCHWINDENHAMMER, UNIVERSITY OF GIEßEN, GERMANY

TECHNICAL FACILITATOR: JANA BIRNER, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 9:00-10:30 UTC+2

Mapping Northern constructs: Contradictions, double binds, and trade-offs between SDGs 8, 9, 12, and 15

JUDITH KRAUSS AND ANDREA JIMÉNEZ CISNEROS, UNIVERSITY OF SHEFFIELD, UNITED KINGDOM; AND MARINA REQUENA I MORA, UNIVERSITY OF VALÈNCIA, SPAIN

Arguably, the SDGs are flawed in two key ways: they silo issues into different goals, targets and indicators without much consideration for connections and contradictions within and between these; and they mainly reflect ideologies and constructs rooted in the global North. Consequently, this research project analyses the interconnections, contradictions and underlying theoretical assumptions in four SDGs: SDG 8 on decent

work and economic growth, SDG 9 on innovation, SDG 12 on sustainable production and consumption, and SDG 15 on life on land. These are chosen firstly given the many, often unacknowledged, connections which exist between these goals, but also given these fields historically essentialising ideas from the global North as universally applicable. The analysis conducted is twofold. In a first step, we map the connections which exist, according to the official SDG indicators, between these goals. Going beyond these official ties, we explore which contradictions, double binds or trade-offs emerge. In analysing the relationships between indicators and particularly GDP per capita, we find that the SDGs are embedded in a double-bind, cognitively dissonant dual message of mandating the protection of nature while calling for the acceptance of the necessity of current economic development. A second step in the analysis then questions what constructs determine the logics inherent in SDG 8, SDG 9, 12 and 15 and their interconnections. We argue that the unacknowledged trade-offs and the SDGs' growth-dominant, Northern assumptions pull into question attaining the SDGs' objective, that is, safeguarding advances for people, planet and prosperity, as we question whose prosperity, what people and what idea of planet are prioritised.

SDGs and the added value of a faith-inspired approach

RIANNE C. TEN VEEN AND DAAN ELFFERS, STICHTING ISLAMIC REPORTING INITIATIVE, THE NETHERLANDS

In order for the SDGs to be achieved throughout the world, they need to be seen as relevant by all stakeholders. For some stakeholders the SDGs are perceived more of a Western construct, limiting the opportunities for success. Islamic economic principles emanate from the notion of unity and social responsibility consistent with values of goodness that serve humanity, underlining rights and obligations of individuals towards each other, in contrast to a system that promotes a self-centred or commercial approach tailored towards personal gains and profit maximisation. With one in seven in the world being a Muslim, demonstrating the significant overlap of the objectives of the SDGs and Islamic principles will be a win-win for all, enabling. The Islamic Reporting Initiative is thus working on research to demonstrate this overlap, with as objective to support deeper understanding (not proselytisation!) within the SDG community on the added value of being open to a faith-dressed version of the Global Goals (as would be faith-dressed versions from other faith perspectives), enabling wider and more diverse stakeholders to engage meaningfully with the Global Goals. At the 2020 Symposium, Islamic Reporting Initiative presents a developed draft of the SDGs set against Islamic principles.

Integrating SDGs with spirituality for the achievement of the United Nations 2030 Agenda: The Islamic way

MEHWISH KAREEM, SHAOOR TRAININGS AND CONSULTANCY, PAKISTAN

This paper offers a new approach for expediting the successful implementation of SDGs. We propose incorporation of a spiritual approach for improving SDGs awareness and knowledge. Guidance about social, economic and environmental factors has already been included in the educational material about the 17 SDGs. But, as almost 79 percent of the world's population follows a religion, spirituality can also be added in the process of educating people. Major religions of the world include Christianity, Islam, Hinduism, Buddhism and Chinese Traditional Religion. Finding common grounds between SDGs and these religions' teachings could assist in penetrating the masses and ensuring 'no one is left behind' in the process of SDGs education. Among countries that suffer the most in achieving sustainable development, Muslim countries are in majority. Therefore, this paper takes Islam as a case for discussion. The purpose of this paper, an ongoing research, is to explain SDGs from Islamic perspective, and propose Islamic ideology as a common ground for improving awareness and knowledge of SDGs among Muslims worldwide. Based on secondary data, each SDG is linked with verses from Al-Quran and ath (sayings of Prophet Muhammad PBUH). Also, we discuss the Islamic ideology for sustainable development, and provide a brief description of guidelines,

tools and incentives that Islam offers for a sustainable lifestyle. It is found that similar to SDGs, the Islamic concept of development also emphasises responsible use of resources; empathy for others; simpler lifestyles and minimal consumption. We conclude by proposing that the opportunity for achieving SDGs could be improved if a more holistic framework, involving spiritual injection, is used for awareness and knowledge.

The role of value conflicts in the food-energy-water nexus sectors in Germany

CAROLIN MÄRKER, SANDRA VENGHAUS, AND HOLGER SCHLÖR, RESEARCH CENTER JÜLICH, GERMANY

The SDGs incorporate a holistic perspective that aims at achieving the goals in a coherent manner. However, trade-offs between the different goals exist that cannot be addressed by isolated policies. With regard to the management of natural resources, such as water, energy, and land, the nexus concept has been developed which focuses on the interrelations among these resources and thus touches upon various SDGs. Even if Germany in 2016 already transferred the SDG structure to its sustainable development strategy a coherent management of the nexus sectors is still missing. This paper shows that existing problems can result from different, sometimes even conflicting underlying values. Values are defined as normative guiding principles that are shared by a society and generally hold important. We analyse underlying values of related policy fields in Germany by means of a computer-assisted qualitative document analysis. The results reveal that sustainable development is, in fact, promoted as the guiding principle for policymaking. However, in many policy processes it falls short or is treated equally to other underlying values. In energy policy values of security of supply, environmental sustainability, and economic performance are important. These also apply for agricultural policy, along with quality and health issues. In the field of water policy values, such as the protection of water resources and safe drinking water can be found. It becomes apparent that some values (for example, environmental protection and health) are more compatible with the guiding principle of sustainable development than others (for example, economic performance). Therefore, underlying value conflicts need to be analysed and addressed in order to develop coherent and coordinated policies.

STREAM II: INTEGRATION AND INTERLINKAGES

Panel INTEGRATION AND INTERLINKAGES-1: Interlinkages among SDGs [Part 1]

CHAIR: PRAJAL PRADHAN, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

TECHNICAL FACILITATOR: NOA Klapwijk, Utrecht University, The Netherlands

TIME: 9 JUNE, 16:00-17:30 UTC+2

Developing a framework for achieving the SDGs: The example of human health and well-being

ANA RAQUEL NUNES, UNIVERSITY OF WARWICK, UNITED KINGDOM

This study argues that, despite the United Nations adoption of the SDGs, a framework for operationalising them in an integrated fashion is lacking. The findings of our study signpost particular links and interdependencies between health and wellbeing and other SDGs. Building on this an agenda for linking SDG 3 to all other SDGs is developed. This presentation puts forth a framework for integrating health and well-being across the SDGs as both preconditions and outcomes of sustainable development. We present a rationale for this approach and identify the challenges and opportunities for implementing and monitoring such a framework through a series of examples. We encourage other sectors to develop similar integrating frameworks for supporting a more coordinated approach for operationalising the 2030 Agenda for Sustainable Development. The SDGs represent a unique opportunity to focus the attention of an array of actors (that is, individuals, communities, institutions) onto safeguarding the health and wellbeing of our species and the planet we live on. Evidence shows that, prioritising health as a policy framework could support achieving the SDGs. In doing so, we argue that it is vital to engage policymakers, individuals and communities to develop, implement and assess policies to address the social, environmental, political, cultural and economic determinants of health.

Harvesting synergy from SDG interactions

MATTEO PEDERCINI AND STEVE ARQUITT, MILLENNIUM INSTITUTE, SWEDEN; DAVID COLLSTE, STOCKHOLM RESILIENCE CENTRE, SWEDEN; AND HANS HERREN, MILLENNIUM INSTITUTE, UNITED STATES OF AMERICA

The SDGs offer a compelling vision and universally agreed-upon framework to achieve a sustainable and equitable future – but present a costly undertaking in the short term. Our research suggests that synergetic effects arising from appropriately designed policy mixes can bring significant cost savings and improve SDG attainment. Identifying and quantifying synergies requires innovative and unorthodox approaches to policy analysis such as those operationalised in our three pilots. The synergy assessment method and typology introduced in this paper are widely applicable, even though the patterns of synergies vary considerably between countries. Our pilot studies focus on national policy for the SDGs. Our approach is nevertheless generalisable to integrated planning at other scales and time horizons.

Panel INTEGRATION AND INTERLINKAGES-2: Interlinkages among SDGs [Part 2]

CHAIR: JEAN LUC CHOTTE, FRENCH NATIONAL RESEARCH INSTITUTE FOR SUSTAINABLE DEVELOPMENT, FRANCE

TECHNICAL FACILITATOR: JOUK HOGENHUIS, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 11:00-12:30 UTC+2

Using the systemic potential of multiplication of the SDGs

MYRIAM PHAM-TRUFFERT AND PETER MESSERLI, UNIVERSITY OF BERN, SWITZERLAND

We distinguish three dimensions of interactions among SDGs and their targets: interactions happening at the policy-level pointing to conflicting worldviews and priorities, interactions happening at the level of the allocation of resources for SDG-specific actions, and systemic interactions between social-ecological systems that create unintended consequences for achieving other SDGs. In business-as-usual scenarios, decision and policy makers naturally tend to work toward achieving their goals, bringing about spill over effects in the social-ecological world as a result of their action. However, policy coherence to implement the SDGs as a whole would imply working the other way around: Understanding interactions in social-ecological systems and their dynamics first, to then consider the normative implications in terms of SDG governance. Our analysis of the current body of knowledge on SDG interactions at systemic level reveals important systemic multipliers of trade-offs and co-benefits, as well as concrete entry-points of 'virtuous circles' to implement the SDGs towards transformative change. These methodological findings imply moving from achieving targets one by one, towards using the systemic potential of multiplication of the SDGs and hence moving from incremental and linear change to accelerated and exponential transformations.

Variations in synergies and trade-offs between SDGs: Regions, incomes, and data disaggregation

ANNE WARCHOLD, PRAJAL PRADHAN, JÜRGEN KROPP, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

To fulfil the 2030 Agenda with the 17 SDGs, the complexity of SDG interactions needs to be disentangled. That is progress in a goal is not made at the expense of progress in others. However, we currently have limited understanding on SDG interactions. Hence, we design cross-sectional correlational research using the official Global SDG indicator for the reference year 2016 to understand SDG interactions under the entire development spectrum. We apply several correlation methods to classify the interaction not only as synergy or trade-offs but also to characterise them according to their monotony and linearity. We also analyse SDG interactions considering income, regional and population groups. This enables to detect SDG inequalities in the context of the 2030 Agenda's ambition to 'leave no one behind'. We here provide four new insights. First, our analysis reveals a variation of SDG interactions globally in 2016 to the extent that synergies always outweigh trade-offs, linear outweigh non-linear interactions and non-monotone SDG interactions are not detected at all. Second, SDGs 1, 5 and 16 are the goals most commonly associated with linear synergies, SDGs 3 and 7 with non-linear synergies, whereas SDG 5 also exhibits most linear trade-offs and SDG 3 non-linear trade-offs. Third, a country's income, region and the gender, age and location of its population has impacts on the variation of SDG interactions. Fourth, we detect the following vulnerable disadvantaged groups: low-(middle)-income countries, Latin America, Africa, women, youth and rural areas. In summary, we highlight that the achievement of SDGs will depend on whether the detected associations and inequalities can be leveraged to 'leave no one behind'.

Influence of the SDGs on interlinkages: Domestic policy change on palm oil governance

ALIZAN MAHADI, INSTITUTE OF STRATEGIC AND INTERNATIONAL STUDIES, MALAYSIA, AND KEIO UNIVERSITY, JAPAN

The SDGs must be addressed in an integrated manner. However, there is little evidence of policy integration occurring at the implementation stage and translated to the domestic level. While previous research on interlinkages across issue areas focused on the challenges of integrating the various multilateral agreements, the SDGs provide a case study on whether a governing through goals approach can be utilised as a tool to increase policy integration across the various goals and targets. This paper analysed this prospect by assessing the influence of the SDGs on domestic policy change on addressing interlinkages. Specifically, it traced the determinants of domestic policy change in implementing interlinkages and analyses whether and how the SDGs influenced this change. Towards this end, the research identified a set of mechanisms that elucidate the pathways of how causal influence travels from goal setting to domestic policy and tested it on the case of interlinkages across biodiversity and the palm oil sector in Malaysia. A multi-causal process tracing leading up to a policy change for a moratorium on oil palm expansion was undertaken. The findings are three-fold. Firstly, it identified the mechanisms of how the SDGs were utilised by various actors to influence addressing interlinkages. Secondly, the conditions and constraints under which domestic policy change occurred were identified. Finally, the paper demonstrated that a non-linear process took place with interactions across the different mechanisms and actors. In summary, the SDGs resulted in mainly tactical linkages rather than substantive linkages, where actors linked issues for their own benefit, with little scientific or normative consensus.

Panel INTEGRATION AND INTERLINKAGES-3: Interlinkages among SDGs [Part 3]

CHAIR: ANITA BREUER, GERMAN DEVELOPMENT INSTITUTE, GERMANY

DISCUSSANT: MARÍA NATALIA PACHECO RODRIGUEZ, FORMER COUNSELLOR OF THE PERMANENT MISSION OF BOLIVIA AT THE UNITED NATIONS, SWITZERLAND

TECHNICAL FACILITATOR: ALINA WEIß, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 9:00-10:30 UTC+2

Identifying interactions for SDG implementation in Ireland

MARTIN LE TISSIER AND HESTER WHYTE, UNIVERSITY COLLEGE CORK, IRELAND; AND ANNE-SOPHIE STEVANCE, INTERNATIONAL SCIENCE COUNCIL, FRANCE

The SDGs form by design an integrated agenda that brings together many of the economic, social and environmental dimensions of development and are celebrated as indivisible recognising that achieving sustainable development will require addressing all the SDGs. Moving from the aspirational goals to implementation of the ground comes with two important considerations: 1. Prioritising and implementing the SDGs need to be fully cognizant of the synergies and conflicts between SDGs. 2. The SDGs need to be translated and integrated with national policies to drive change and mobilise actors. The International Science Council has a programme to understand the interactions between SDG targets to identify nodes of interaction where actions, including policy actions, are most likely to have impact. These can then be prioritised. Further the spill-over effects and trade-offs can be made more apparent to policymakers and influence their option-taking. The programme has developed an online software tool to score between goals or targets (based on a seven-point scale describing the level of influence of one target on another) and visualising the web of links between SDGs. This paper reports on the initial outcomes of a project to explore

SDG interlinkages from the outlook of the Republic of Ireland's national priorities and context in order to arrive at a consensus map showing critical policy nodes to advance SDGs implementation and monitoring from the perspective of the role the environment plays in sustainable development. The results signpost the challenges for the interpretation of SDGs in the context of national priorities and circumstances to facilitate integration of sustainability goals with those of social and economic development.

Mapping the new National Biofuel Policy (Renovabio)'s contributions to the achievement of the SDGs in Brazil

FERNANDA SILVA MARTINELLI, LISA BIBER-FREUDENBERGER, AND JAN BÖRNER, UNIVERSITY OF BONN, GERMANY

With the potential to contribute to the 2030 Agenda by using renewable bio-based products, bioeconomy strategies have spread in several countries. However, the same strategy might contribute to the achievement of some SDGs while undermining the achievement of others. The objective of this study was to identify the most likely to be affected SDG targets (positively and/or negatively) by bioeconomy in Brazil, looking into the most promising bioenergy national policy: the Renovabio. The policy designs a system of tradable carbon savings credits, with the quantity of credits assigned reflecting the emissions saved by the biofuel's production process. We identified the affected targets through literature review and expert surveys. The survey was conducted with 41 experts from scientific community (37 percent), civil society (24 percent), producers and farmers (24 percent), and policymakers (15 percent). Those experts perceived the Renovabio impacts on the SDGs' performance as positive; the policy would affect a higher number of targets positively than negatively, with greater intensity. Six different SDGs will be the most benefited by the policy, especially the SDG 7 (clean energy) and SDG 2 (zero hunger). However, some targets would suffer both positive and negative impacts, such as the SDG 15 (life on land), which also had 5 of its targets most negatively affected, along with water and food-related targets. SDG 15 is a concern due to the decision on opening the Amazon region to sugarcane. Because bioeconomy might affect SDG targets' performance differently, biodiversity protection, water pollution, and inequalities are aspects of high relevance for monitoring the policy in the coming years.

Why climate crises are migration crises? A study of interlinkages between climate change and Indonesian forced migrant worker

SAFINA MAULIDA, MIGRANT CARE, INDONESIA

The climate crisis caused many crises, not only in the environmental sector, but also in the economic and social sectors. In Indonesia, where villagers who live with nature are vulnerable to being directly affected. For example, the impact of climate change can make some of those who work in agriculture sector lose their jobs as for their main source of income. The fact that many of the villagers of Indonesia choose to work outside their area or even choose to become migrant workers in order to meet economic needs, and most of them are women. This makes us jolted about the interlinkages between the climate crisis and migration. Which then made us realise that climate change mitigation is not only a matter of reducing greenhouse gas emissions but also issues of justice, social justice, human rights and sustainability. For this reason, there must be a special outlook in the link between climate change policies and migration. Through, if we ignored the interlinkages policy between those sector by made it separately and irrefutably critical, Indonesian migrant workers will always be the sort of Forced Migrant Worker as the basis to migrate. Which will not be far from people of climate migration and belong to a group of vulnerable migrant workers. The point of view of feminism and human rights can be the core argument of this paper.

Natural resource governance in light of the 2030 Agenda. The case of competition for groundwater in Azraq, Jordan

INES DOMBROWSKY AND RAMONA HAEGELE, GERMAN DEVELOPMENT INSTITUTE, GERMANY

An integrated implementation of the 2030 Agenda with its 17 SDGs requires the mobilisation of synergies and the mitigation of trade-offs between economic, social and ecological dimensions of sustainable development. For example, water, energy and food (WEF) security and thus SDGs 2 (Zero hunger), 6 (Clean water and sanitation), 7 (Affordable and clean energy), 13 (Climate action) and 15 (Life on land) are closely linked. Particularly in water-scarce countries it may be challenging to achieve all three WEF securities simultaneously. We therefore analyse how the implementation of the 2030 Agenda in Jordan affects the governance of the WEF nexus using the case of the Jordanian highlands, where households, smallholder farmers, profit-oriented farmers and ecosystems compete for shrinking groundwater resources. Specifically, we draw on a Social Network Analysis, semi-structured interviews with government representatives at multiple levels, end users and civil society, as well as a policy document analysis to assess which actors interact to achieve the 2030 Agenda and if and how the Agenda affects policy implementation on the ground. Preliminary findings show that the 2030 Agenda has influenced strategy formulation in the water, but not in the energy and agriculture sectors. However, so far, the 2030 Agenda has not yet affected the governance of the water-energy-food nexus in our study area. Possible explanations can be found in Jordan's SDG implementation mechanism, which neglects the sub-national level, and more profoundly in the Kingdom's organisation of political power, the so-called shadow state that counteracts many formal policies. Hence, an inclusive implementation of the 2030 Agenda would require deeper political reforms.

Panel INTEGRATION AND INTERLINKAGES-4: Integration and Coherence [Part 1]

CHAIR: HELEEN VAN SOEST, PBL NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY, THE NETHERLANDS

DISCUSSANT: INGEBORG NIESTROY, INSTITUTE FOR ADVANCED SUSTAINABILITY STUDIES, GERMANY

TECHNICAL FACILITATOR: FENNA VOGELZANG, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 16:00-17:30 UTC+2

Integrated policymaking: A comparative analysis of institutional designs for implementing the SDGs

ANITA BREUER AND JULIA LEININGER, GERMAN DEVELOPMENT INSTITUTE, GERMANY; AND JALE TOSUN, HEIDELBERG UNIVERSITY, GERMANY

An integrated implementation of the SDGs and their targets will require innovative governance approaches at the national and local level in order to exploit synergies and mitigate trade-offs between the SDGs. Considering that deep institutional transformation will be necessary to coordinate the achievement of the SDGs, it is necessary to understand how national governments interpret the call for enhancing policy coherence for sustainable development. The paper analyses the Voluntary National Reviews submitted by 102 countries to the United Nations High-Level Political Forum between 2016 and 2018. In a first step, the analysis will focus on the different institutional and procedural approaches for SDG implementation brought forward by national governments, including: the proposed institutional set-up for the horizontal coordination of SDG implementation across sectors and institutions; institutional mechanisms to ensure vertical integration between levels of government in the planning, follow-up, and review of the SDGs; the adoption of mechanisms to engage non-state stakeholders in SDG implementation and monitoring;

institutional efforts to support the alignment of the 2030 Agenda with other national strategies such as national development plans. In a second step, the analysis will identify patterns of relationships between national political-institutional contexts (regime type, form of state organisation, state capacity, dependency on official development assistance, etc.) and proposed approaches for SDG implementation and come forward with explanations of the causal relations underlying these patterns.

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

EILEEN DE JONG AND MARJANNEKE VIJGE, UTRECHT UNIVERSITY, THE NETHERLANDS

The discourse of sustainable development has evolved over time. The Millennium Development Goals and the SDGs reflect the most recent discursive evolution. We analyse key differences in storylines of the SDGs and Millennium Development Goals and develop a conceptual framework to study these, focusing on the objectives of sustainable development, the means to reach those objectives, and the relations between developing and developed countries. We apply this framework in quantitative and qualitative discourse analyses of the Policy Coherence for Development approach of the Netherlands from 2000. This shows that national policy frameworks closely reflect global discourses. In the MDG era, the key objective of sustainable development was poverty reduction to be reached through economic growth and participation in the global trade system. The SDGs have broader objectives across the economic, social and environmental dimensions. This evolution is reflected in the Dutch Policy Coherence for Development approach, first through a safeguard approach, and later with social and environmental sustainability as key objectives. While the Millennium Development Goals mainly focus on national averages and the poorest, the SDGs target the most marginalised and vulnerable groups with a focus on disaggregate data. In this respect, the Netherlands was ahead of its time by acknowledging in the early 2000s that ‘there is no question of “the” developing countries’. The Dutch Policy Coherence for Development approach also reflects the changed conceptualisation of the relations between developing and developed countries. This changed from ‘aid’ towards partnerships with developed countries. We end with a reflection on how our research findings relate to changes in broader discourses around (sustainable) development and development cooperation.

Integrating ‘governance through goals’ into foreign policy: The promotion of the SDGs in China’s Belt and Road Initiative

BRUNA BOSI MOREIRA, UNIVERSITY OF DUISBURG-ESSEN, GERMANY AND UNIVERSITY OF BRASILIA, BRAZIL; AND ALEXANDRE SAN MARTIM PORTES, AUSTRALIAN NATIONAL UNIVERSITY, AUSTRALIA

This paper aims to investigate how the SDGs have been promoted in Chinese foreign policy in the context of the Belt and Road Initiative. China has been actively trying to position itself as a key and responsible actor in global governance mechanisms, especially in those related to climate and sustainability. As part of such an attempt, it has gone beyond implementing the SDGs domestically and has moved on to incorporating the agenda to its foreign policy in the context of the Belt and Road Initiative. Despite the growing literature on the role of China in promoting the SDGs domestically, few scholarly works explore the promotion of these goals beyond Chinese borders. Drawing on a qualitative analysis of official Chinese documents concerning the Belt and Road Initiative, this paper explores the integration of the SDGs goal-setting agenda into Chinese foreign policy. Furthermore, it provides empirical evidence of this policy linkage, based on Chinese investment cases linked to the Belt and Road Initiative. This study contributes to the current literature on global goal-setting as a governance mechanism as it provides new theoretical insights into the influence of global goals on domestic policymaking, showing that the goal-setting agenda can shape foreign policy (an area not directly linked to the SDGs). Besides, it underscores that a country’s foreign policy might influence the implementation of global goals in other countries and could be understood as a driver for

domestic change. Apart from answering the main research question, this paper aims to: debate the integration of foreign policy and global agendas, especially the SDGs; discuss the Chinese role in shaping current global sustainability agendas; and evaluate Chinese domestic and international promotion of the SDGs.

Does policy coherence leave no one behind? A comparative analysis of the governance of Sustainable Development Goals in Indian states

MARJANNEKE VIJGE AND NIKKI THEEUWES, UTRECHT UNIVERSITY, THE NETHERLANDS

The UN Sustainable Development Goals (SDGs) are a set of ‘integrated and indivisible’ goals with which countries pledge to ‘leave no one behind’. Key in realising such a vision of global justice is pursuing policy coherence, which is widely believed to encourage mutually reinforcing and thus more effective policy actions that benefit all. Research shows, however, that interactions between and unavoidable prioritisation of (sometimes contradicting) SDGs have important consequences for inequality. It is therefore crucial to understand the often-overlooked political processes of pursuing policy coherence and the consequences for who wins and who loses, especially in countries with rapid – but often unequal and sometimes unsustainable – economic and social developments. This article focuses on the politics of policy coherence through a comparative analysis of the governance of SDGs in Indian states. India’s approach to SDG implementation is one of ‘cooperative’ or ‘competitive federalism’, with every state having the mandate to coordinate SDG implementation at the state (and sometimes district and village) level. For this research, four states were selected – Haryana, Assam, Punjab and Kerala – based on different levels of progress in SDG achievement, geographical spread, and different ways of clustering the SDGs to organise policy coherence processes. While some states assigned nodal departments for each SDG (Kerala), others have established an SDG coordination centre (Haryana and Punjab). States also show differences in ‘ownership’ over SDG coordination, with different degrees of collaboration with international organisations, in particular the UN Development Programme. The research draws on insights from an initial in-depth case study of Haryana. This shows that despite political commitment for policy coherence and alignment of the SDGs with the state budget, the siloed institutional and political structures based on which the SDGs are clustered prevent historically less prioritised goals such as gender equality from being fully integrated into Haryana’s SDG vision and budget allocation. Further comparative analysis with the other Indian states will reveal the conditions under which policy coherence processes succeed or fail to leave no one behind. The article contributes theoretical insights into the consequences of policy coherence for social inequality. With India often being considered a global example of localising the SDGs, empirical insights are generated into whether and how SDGs succeed in leaving no one behind and in making the global goals meaningful at subnational levels.

Panel INTEGRATION AND INTERLINKAGES-5: Integration and Coherence [Part 2]

CHAIR: ÅSA PERSSON, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN

DISCUSSANT: RYAN WONG, LUDWIG MAXIMILIAN UNIVERSITY OF MUNICH, GERMANY

TECHNICAL FACILITATOR: MATTEO SPINAZZOLA, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 14:00-15:30 UTC+2

Goal conflicts and synergies between climate change and the SDGs: A literature review

ADIS DZEBO, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN AND UTRECHT UNIVERSITY, THE NETHERLANDS; ZOHA SHAWOO, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN; JULIE WILK, LINKÖPING UNIVERSITY, SWEDEN; GABRIELA IACOBUTA, GERMAN DEVELOPMENT INSTITUTE, GERMANY; KENNEDY WAHOME, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN; RAMONA HÄGELE AND SANDER CHAN, GERMAN DEVELOPMENT INSTITUTE, GERMANY; CASSILDE MUHOZA, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN; BJÖRN-OLA LINNÉR, LINKÖPING UNIVERSITY, SWEDEN; AND SILVIA VALENTINI, GERMAN DEVELOPMENT INSTITUTE, GERMANY

The objective of this paper is to review the relevant literature on goal conflicts and synergies between Agenda 2030 and the Paris Agreement, focusing on policy coherence. It aims to connect various perspectives of policy coherence by analysing the established literature on interlinkages between climate change and sustainable development, to draw informed conclusions on the nature and dynamics of coherence (or lack thereof) between the two agendas. Findings are presented based on an analysis of 70 papers, including a combination of journal articles, book chapters and policy reports. Drawing on work by the OECD, the analytical approach focuses on four dimensions: objectives, actors, processes and outcomes. The multi-dimensionality of policy coherence emphasises a maximisation of synergies and an avoidance of conflicts between potentially competing objectives and goals to realise sustainable development at large. It also calls for the need to coordinate the efforts by a large number of actors, at multiple levels of governance, to ensure that processes of coordination are legitimate and that the outcomes are effective. The analysis explores whether and how goal conflicts and policy incoherence between climate and other sustainability goals hamper their realisation at different scales and explores governance options for implementing synergies in different contexts. Overall, findings suggest that: synergies and conflicts emerge across social, economic and environmental goals and manifest differently at national and local scales; almost all goal interactions have repercussions around poverty and inequality; and it is crucial to consider why incoherence may be persisting to begin with.

Policy coherence in climate and SDG implementation: Lessons from the comparative politics literature

ZOHA SHAWOO, AARON MALTAIS, AND ADIS DZEBO, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN AND UTRECHT UNIVERSITY, THE NETHERLANDS; AND JONATHAN PICKERING, UNIVERSITY OF CANBERRA, AUSTRALIA

The highly cross-cutting nature of the Paris Agreement and the 17 SDGs of the 2030 Agenda raises the question of how to coherently implement these two agendas. The literature on policy coherence focuses primarily on intra-governmental policy processes and institutional interactions in dictating coherence between various agendas and policies. In contrast, the comparative politics literature goes beyond this to also consider the role of ideas and interests as complementary explanations to institutional factors in policy change. However, no studies exist explicitly linking these two bodies of literature to hypothesise how the so called 3 I's may act as underlying factors dictating the degree and consequences of policy coherence. Bridging these two literatures and developing a theoretical basis for explaining the role of ideas and interests in achieving (or not) policy coherence is an important step in policy coherence research. Much of the work

to date places a lot of emphasis on institutional factors dictating coherence. As a result, less technocratic and more political explanations for coherence are often side-lined. This paper aims to fill this gap by linking these two literatures together in the context of the Paris Agreement and the 2030 Agenda. It introduces an analytical framework for studying policy coherence and the role of the 3 I's at different policy stages: policy input, policy process and policy outcome. This framework is developed specifically for studying the implementation of climate and the SDGs, but can also be applied more widely in policy studies. This work will serve as a basis for comparative empirical studies on policy coherence between the two agendas at the national level.

Overcoming incoherence in the environmental welfare state

SARA GOTTENHUBER, BJÖRN-OLA LINNÉR, AND VICTORIA WIBECK, LINKÖPING UNIVERSITY, SWEDEN; AND ÅSA PERSSON, STOCKHOLM ENVIRONMENT INSTITUTE AND LINKÖPING UNIVERSITY, SWEDEN

Achieving national policy coherence between the implementation of the 2030 Agenda and the Paris Agreement is of paramount importance to ensure successful implementation of the 17 SDGs and the Nationally Determined Contributions. Sweden is often heralded as an example ambitious climate policy. The Government has a communicated ambition of being one of the first fossil free welfare states while being a frontrunner in implementing the 2030 Agenda. Nevertheless, initial findings indicate that Sweden is struggling to meet some of the SDGs, as well as keeping on track to meet the targets of its climate law, notably so in the transport sector. This paper investigates potential synergies and tensions between – and within – the 2030 Agenda and the Paris Agreement in the Swedish policy landscape. Despite political efforts to let this ‘new global framework for sustainable development’ guide Swedish policy and implementation, conflicts have already emerged. Institutionally, this is displayed through a lack of sectoral objectives to meet emission targets or low levels of consideration of climate and SDG impact in indirect policies. Publicly, one of Sweden’s primary instrument in the transport sector, the carbon tax, faces opposition motivated by fairness and equality grounds challenging the ‘leave no one behind’ narrative of the 2030 Agenda. In order to gain further insights on the implication of governance efforts to achieve policy alignment and coherence, this paper address the role of leadership, ideas, institutions and interests, represented by state and non-state actors involved in the national implementation process of the SDGs and the Nationally Determined Contributions.

Coherent climate and sustainable development finance: The role of development assistance in boosting climate action

GABRIELA IACOBUTA AND CLARA BRANDI, GERMAN DEVELOPMENT INSTITUTE, GERMANY; SOFIA ELIZALDE DURON, RESEARCH INSTITUTE DR. JOSÉ MARÍA LUIS MORA, MEXICO; AND ADIS DZEBO, STOCKHOLM ENVIRONMENT INSTITUTE, SWEDEN AND UTRECHT UNIVERSITY, THE NETHERLANDS

The Paris Climate Agreement, the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda on finance were all adopted in 2015. To date, countries are still struggling to take the necessary action and set themselves on course for the achievement of these agreements. The 2019 conference of the parties in Madrid has revealed substantial challenges in raising climate ambition and the necessary finance. Transitioning to a low-carbon and climate resilient world and staying below a maximum temperature increase of 1.5°C and even 2°C, require deep transformations across all economic sectors. As the NDC-SDG Connections tool (ndc-sdg.info) indicates, pledged climate activities in countries’ Nationally Determined Contributions touch upon all SDGs. Moreover, climate change itself will have substantial negative implications for development. In that sense, climate and development are strongly interconnected and an efficient use of financial resources would require coherent climate and development finance. By means of the NDC-SDG Connections Tool climate activities data, we identify action areas that countries requested

international support for. We place these requests in the context of OECD official (climate-related) development assistance data pre- and post-Paris Agreement to identify coherence, gaps and opportunities for further alignment of climate and development actions. We find that policy coherence of climate and development finance can be substantially improved. Through a closer look at countries stated needs, barriers and gaps and drawing upon literature on climate-development interlinkages, we discuss potential ways forward to make official development assistance more climate proof for both mitigation and adaptation.

Panel INTEGRATION AND INTERLINKAGES-7: Integration and Coherence [Part 4]

CHAIR: AMANDINE ORSINI, UNIVERSITE SAINT-LOUIS BRUXELLES, BELGIUM

DISCUSSANT: INGRID VISSEREN-HAMAKERS, RADBOUD UNIVERSITY, THE NETHERLANDS

TECHNICAL FACILITATOR: KARIANNE TARANGER, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 14:00-15:30 UTC+2

Reconciling decent jobs and low carbon economy: an impossible task?

AZITA BERAR-AWAD, GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES, SWITZERLAND

This paper will focus on the inter linkages between goal 8 on Decent work and economic growth and Goal 15 and the Paris Agreement. The paper will critically review the conceptual frameworks, through an interdisciplinary lens, that analyse the trade-offs and incompatibilities in the short and long terms and those that sustain positive externalities and synergies. The main focus of the paper will be laid on mapping and assessing the policy proposals, and innovative solutions that are on the table to reconcile these objectives in the Global North and Global South. The paper will not deal with technological innovation for transition to the carbon economy but rather social and institutional engineering that aim to cushion transitions for those whose jobs, livelihoods and well-being is affected by transition to the green economy. And it will analyse how to address the inherent incompatibilities across policy instruments (for example carbon tax and social protection floor). The main purpose is to assess the current state of conceptual and policy incoherence (at least in the short run) of these objectives, as well as bring to the fore those proposals or actual experimentation in reconciling these goals, and its implications. The paper's aim is to map different conceptual underpinning of the interlinkages as well as to point to policy avenues that deserve further research and practical experimentation.

Tackling trade-offs and synergies in the context of specific goals

GALA DÍAZ LANGOU, JOSÉ FLORITO, ALEJANDRO BIONDI, FLORENCIA CARO SACHETTI, AND LUCIANA PETRONE, CENTRO DE IMPLEMENTACIÓN DE POLÍTICAS PÚBLICAS PARA LA EQUIDAD Y EL CRECIMIENTO, ARGENTINA, AND SOUTHERN VOICE

Defining the 2030 Agenda as an 'indivisible whole' implies understanding that the three pillars of sustainable development (social, economic and environmental) are more than separate components that need to be reconciled. Rather, they are deeply intertwined dimensions that cut across the entire development agenda. All SDGs are therefore deeply interconnected by design, but the interactions among goals and targets are not necessarily positive. There is room for both synergies and trade-offs, scenarios of either mutual benefit or of achieving one goal at the expense of another. The need to analyse synergies and trade-offs among

SDGs is increasingly clear in 2030 Agenda literature. However, large gaps remain regarding conceptualisation, methodologies and use of this approach to inform concrete decisions about 2030 Agenda implementation in domestic contexts. This paper, produced as part of Southern Voice's State of the SDGs Initiative, contributes to closing these gaps through a threefold strategy. First, it produces a thorough analysis of where the debate stands in terms of conceptualisation and methodologies for measuring synergies and trade-offs. Second, it develops an original framework for integrating new evidence on the interlinkages among six goals (SDGs 1, 3, 4, 5, 7 and 8) in six countries from the Global South (Peru, Bolivia, Ghana, Nigeria, India and Sri Lanka). It uses this framework to contrast the new findings with what was previously known about the interlinkages. Third, it presents lessons learnt and offer policy recommendations for maximising synergies and mitigating trade-offs, both tailored to each specific interlinkage and regarding the overarching governance and institutional dimension, in the domestic and international levels.

Whose hand and what hammer to break the silos? A review of operationalisation, measurement, and implementation of policy coherence for sustainable development

ONDŘEJ HORKÝ-HLUCHÁŇ, INSTITUTE OF INTERNATIONAL RELATIONS PRAGUE, CZECH REPUBLIC

As a synthesis of the concepts of policy integration in environmental governance and on Policy Coherence for Development in international development, the Sustainable Development Target 17.14 to 'enhance Policy Coherence for Sustainable Development' aims at introducing governance of synergies and trade-offs between different SDGs horizontally as well as aligning policies at different levels of governance from global to local vertically. Yet can this ambitious and comprehensive mean of SDGs implementation that strives for tackling the multi-dimensional web of sustainable development interlinkages be translated into specific and viable governance tool? If siloisation is a problem for SDGs implementation, what are the incentives for policymakers to break or at least interconnect those silos? Against the academic literature that shows the limited success of implementing both policy integration and Policy Coherence for Development, this paper scrutinises the first five years of the Policy Coherence for Sustainable Development operationalisation, measurement and implementation by United Nations agencies, OECD, European Union as well as the Czech Republic and the Netherlands as two case studies at national level. The paper identifies the all-encompassing complexity of the concept and its measurement design incompatibility and path dependency of the involved institutions and the lack of political incentives and interests to implement a seemingly technical tool of governance as disabling factors for enhancing Policy Coherence for Sustainable Development and it questions the very relevance of Sustainable Development Target 17.14 in its current form.

Panel INTEGRATION AND INTERLINKAGES-8: Integration and Cooperation

CHAIR: MARJANNEKE VIJGE, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: MELANIE VAN DRIEL, UTRECHT UNIVERSITY, THE NETHERLANDS

TECHNICAL FACILITATOR: SUZANNE SPIJKERS, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 9:00-10:30 UTC+2

Achieving cooperation in global energy governance: The role of shared goals in energy efficiency and energy access

CHRISTIAN DOWNIE, AUSTRALIAN NATIONAL UNIVERSITY, AUSTRALIA

In fragmented global governance domains, such as energy, international organisations with overlapping mandates regularly interact. The dynamics of these interactions have important implications for who sets global agendas and rules on some of the most pressing issues facing the globe from decarbonising the energy sector, to providing energy access to billions of people in emerging economies. Despite the proliferation of international organisations, we know very little about the patterns of interactions between them. This is surprising in a world of fragmented global governance, but it also suggests new lines of inquiry. Do International organisations cooperate to achieve governance outcomes in fragmented policy domains? Under what conditions do they cooperate? And under what conditions do they not – when do the patterns of interaction of international organisations reflect forms of competition rather than cooperation? Drawing on primary interviews with international organisations officials, this paper considers the role that global goal setting can play in producing cooperative interactions. Specifically, it considers how the SDGs have shaped interactions of international organisations in two cases, namely energy efficiency and energy access.

Is fungibility of development aid necessary for progress towards SDGs: A case study of Rwanda

ZUNERA RANA, RADBOUD UNIVERSITY, THE NETHERLANDS AND HOCHSCHULE RHEIN-WAAL, GERMANY

This paper investigates aid fungibility in Rwanda and its consequences towards SDGs progress. We use a different starting point than other studies on aid fungibility which view it as something inefficient that needs to be controlled for. We develop instead that aid fungibility might be positive and necessary for attainment of the SDGs. We explore the relationship between development aid and government spending using a mixed method approach combining statistical modelling and interviews with key stakeholders. We first investigate using statistical methods if fungibility of development aid is happening in Rwanda, and we find a U-shaped relation between development aid and public development expenditure, that is, initially as development aid increases in Rwanda, the government development expenditure falls (resulting in fungibility), however the government development expenditure actually rises as more aid comes in. We explore our results further by conducting interviews with key stakeholders on the donor and recipient side to investigate the nature of aid fungibility in Rwanda. We hypothesise that the aid fungibility found in Rwanda is positive in nature and might actually be necessary for progress towards the SDGs as it gives the government more flexibility in diverting its funds to sectors and regions that are not considered by donors. Using our theoretical frameworks we postulate that fungibility is positive if the marginal value added in an alternative sector/region is higher than in the intended sector; equity concerns are adequately addressed when other sectors/regions are supported; and temporal delay helps to cushion instability of aid flows. We conclude that aid fungibility is not black and white as discussed in the development literature and needs to be nuanced further.

Baltic 2030: Glocalised SDGs

ZANE ŠIME, ASSOCIATION OF POLAR EARLY CAREER SCIENTISTS

The Baltic Sea Region is a special area because it is receptive to novel approaches towards supporting multilateral efforts. It was an area where the pioneering EU macro-regional strategy was launched in 2009. Less than a decade later it was an area where the Baltic 2030 Action Plan was endorsed by the Council of the Baltic Sea States. Thus, this part of the world has demonstrated a distinct receptiveness to the experimentalist approaches of transnational coordination which would facilitate better cross-sectoral ties and closer interlinkages between initiatives taken on various levels of governance. Baltic 2030 Action Plan is a unique translation of the SDGs into a Baltic Sea Region-specific context. The novelty does not stop on a mere declarative level. A tailored study on the Baltic Sea Region-specific achievements and challenges tied to the progress reached in the case of each SDG is captured in the report *Baltic 2030: Bumps on the Road* published roughly one year after the launch of the Baltic 2030 Action Plan. Furthermore, the ReGeneration 2030 youth movement was launched in order to ensure that the next generations of opinion leaders and managers working across the Baltic Sea Region would be well-versed in SDGs and their relevance to the Baltic Sea Region-specific context. ReGeneration 2030 ensures that the future change-makers of the Baltic Sea Region will be well equipped to discuss their efforts in a manner which would be easily understandable to their peers in other parts of the world. Filtering Baltic Sea Region-specific issues through the SDGs' lens has given aspiring talents not only solid extra-curricular education but also familiarity with analytical tools which are compatible with the terms and structures guiding the global debates.

STREAM III: INCLUSIVENESS

Panel INCLUSIVENESS-1: Inclusiveness [Part 1]

CHAIR: AZITA BERAR-AWAD, GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES, SWITZERLAND

DISCUSSANT: KLAUS DINGWERTH, UNIVERSITY OF ST. GALLEN, SWITZERLAND

TECHNICAL FACILITATOR: STELLA PFUND, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 9:00-10:30 UTC+2

Youth goals? The future generations' involvement in the SDGs

AMANDINE ORSINI, UNIVERSITE SAINT-LOUIS BRUXELLES, BELGIUM

During the negotiations of the SDGs, 'youth' has been recognised as a major group and has as such been integrated to participate in the drafting of the goals. It is now also involved in their implementation. While these processes are known for having been very inclusive, several signs also indicate some limits of youth involvement in the negotiations and implementation of the goals. First, it is not clear if non-state actors representing youth within the goals' process are autonomous. For instance, the Young Leaders for SDGs programme launched in 2016 is one example of youth involvement, but that has been sponsored by other types of actors such as intergovernmental organisations, that might exercise influence on the selection of youth representatives. Second, youth protests are increasing worldwide, with in particular the landmark Fridays-for-Future movement related to climate change, denouncing also a lack of youth involvement in global policies. Understanding if the SDGs are in line with youth goals is precisely the aim of this contribution. In particular, it proposes to assess to which extent the goals only aim at 'empowering youth', that is put youth in a situation of recipients of politics, or aim at taking youth as 'actors in their own rights'. It first identifies youth actors' involvement in the goals, to then analyse their positions and influence on the goals' process. The research rests on a systematic analysis of youth actors, of their statements and of their actions, during and as follow-up to the adoption of the goals. By doing so, it mostly focuses on the 'inclusiveness' research stream, asking to which extent youth are independent and active actors in the process.

In whose name? Civil society and the representation of the global poor in earth system governance

CAROLE-ANNE SÉNIT AND FRANK BIERMANN, UTRECHT UNIVERSITY, THE NETHERLANDS

Civil society is often uncritically recognised as a democratic force in earth system governance. Civil society organisations aim to hold states and intergovernmental institutions accountable and channel the voices of what would otherwise be the 'Forgotten Billion' – the world's billion poorest people – in global policymaking. Yet to what extent do they succeed in performing that role? While existing research has mainly focused on the representation of the interests of the poorest countries in intergovernmental negotiations on sustainability issues, whether and how civil society organisations legitimately represent the 'Bottom Billion' in these negotiations remains a largely unexplored question. This paper assesses the representation of the global poor in institutionalised civil society participatory mechanisms during the negotiations on the SDGs, a process hailed as the most inclusive ever organised at the United Nations. First, we quantitatively assess the representation of people and civil society organisations from the world's

poorest countries, the Least Developed Countries, in the civil society Hearings of the United Nations Open Working Group on the SDGs. Second, we qualitatively analyse how the global poor are procedurally included within the Major Groups, the main institutionalised mechanism for civil society representation in United Nations negotiations. Third, we discursively evaluate the extent to which the civil society organisations that speak on behalf of the global poor legitimately represent the interests of these populations. We find that the global poor were underrepresented in SDGs negotiations, with unclear procedures for input and lack of mechanisms to hold their representatives accountable, thus undermining the inclusiveness and representation of their interests in earth system governance.

Legitimacy Struggles: Legitimation and de-legitimation of partnerships for Agenda 2030 and the Sustainable Development Goals

AYSEM MERT AND KARIN BÄCKSTRAND, STOCKHOLM UNIVERSITY, SWEDEN

When they were first proposed as novel governance mechanisms to address the implementation deficit in the early 2000s, multi-stakeholder partnerships were contested and challenged by a variety of actors. Since then, they have become prevalent mechanisms of global sustainability governance. In the context of governance by goal-setting, partnerships were even allocated their own goal: SDG 17. In less than fifteen years, they have become acceptable and legitimate for most stakeholders involved in the United Nations sustainability processes. However, there remain contestations regarding the exact form and the space partnerships should be given in United Nations sustainability platforms; some parties question the legitimacy of the partnership concept altogether. Furthermore, new legitimacy issues emerged with the inclusion of voluntary commitments to the partnership registries, and novel reporting and monitoring practices. This paper investigates the hegemonic contestations around the legitimacy of SDG partnerships, using discourse institutionalisation and discourse coalitions to investigate the discursive sources of legitimation of partnerships. We understand legitimacy of institutions as performative and discursive – constructed through repeated practices, ideas, norms and particularly language in discursive spaces. The empirical data (25 in-depth interviews with partners and United Nations officials) is gathered in 2019 at the High-Level Political Forum. We find three sources of legitimation for different discourse coalitions: democratic inclusion, implementation/ output, and lack of alternatives. As for discursive sources of de-legitimation data points to perceived and expected performance and accountability deficits.

Panel INCLUSIVENESS-2: Inclusiveness [Part 2]

CHAIR: AYŞEM MERT, STOCKHOLM UNIVERSITY, SWEDEN

TECHNICAL FACILITATOR: NOA KLAPWIJK, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 11:00-12:30 UTC+2

Three horizons for the SDGs: A cross-scale participatory approach for transformative pathways

DAVID COLLSTE AND ANA PAULA AGUIAR, STOCKHOLM RESILIENCE CENTRE, SWEDEN; ZUZANA V. HARMAKOVA, ACADEMY OF THE SCIENCES OF THE CZECH REPUBLIC, CZECH REPUBLIC; DIEGO GALAFASSI, LUND UNIVERSITY, SWEDEN; LAURA PEREIRA, UNIVERSITY OF LONDON, UNITED KINGDOM; ODIRILWE SELOMANE, STELLENBOSCH UNIVERSITY, SOUTH AFRICA; STOCKHOLM RESILIENCE CENTRE, SWEDEN; AND SANDER VAN DER LEEUW, ARIZONA STATE UNIVERSITY, UNITED STATES OF AMERICA

The SDGs provide a compelling vision for humanity that demands action across several scales. Realising this vision requires narratives where the Agenda 2030 is integrated with the worldviews prevalent in different societies around the world. Here, we present, to the best of our knowledge, the first stakeholder-based approach for visioning and exploring Sustainable Development Pathways to meet the SDGs. The approach embarks from the Three Horizons framework, a participatory approach developed for groups to think about transformational change. We present benefits and challenges of the adapted approach in relation to an illustrative case study, 'The 2018 African Dialogue on The World In 2050', deliberating future pathways for agriculture and food systems in Africa. The paper has two main contributions. First, it discusses and tests the Three Horizons for the SDGs, a participatory approach for visioning and exploring contrasting perspectives about how to reach the SDGs in different contexts, giving voice to multiple actors. Second, we present four alternative pathways for how food systems and agriculture can contribute to meeting the SDGs in Sub-Saharan Africa, integrated with the worldviews of the participating stakeholders.

Leaving No One Behind in a global value chain

KARIN FERNANDO, CHANDIMA ARAMBEPOLA, AND NAVAM NILES, CENTRE FOR POVERTY ANALYSIS, SRI LANKA, AND SOUTHERN VOICE

Most of the SDGs presume global sustainability is a cumulative effect: the individual and independent efforts of states add to global sustainable development. However, this presumption is less sustainable than it seems. A study of the Sri Lankan apparel industry demonstrates how the influence of global governance arrangements affects the ability of society to include its most vulnerable members in the SDG agenda. Specifically, the paper analyses the role of the Global Value Chain (GVC) on the efforts to create sustainable work, i.e. where workers are economically secure, socially mobile, and depend on work that is environmentally sustainable. The national industry is part of a GVC, which is designed to supply the demand generated in developed economies, primarily in Europe and the US. The same GVC facilitates the diffusion of technology that is part of a broader 4th Industrial Revolution. The competitive structure and the diffusion of technology has created a polarisation within the workforce. Thus, the benefits of economic security and social mobility disproportionately flow towards high-skilled workers, while low-skilled workers risk being left behind. Moreover, developing countries face institutional limitations to take advantage of opportunities, and more importantly, reduce vulnerabilities. However, some of these limitations can be traced to the GVC itself because sustainability is often influenced by the weakest and poorest links. To address this problem, global sustainability must be reimagined as a systemic effect: the collective and interdependent efforts of multiple actors including non-state actors determine sustainable development.

Panel INCLUSIVENESS-3: Inclusiveness [Part 3]

CHAIR: CAROLE-ANNE SÉNIT, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: YIXIAN SUN, UNIVERSITY OF BATH, UNITED KINGDOM

TECHNICAL FACILITATOR: BRANDON WHITLEY, UTRECHT UNIVERISTY, THE NETHERLANDS

TIME: 9 JUNE, 16:00-17:30 UTC+2

Designed to be inclusive or exclusive? Brazilian experiences on territorialising the 2030 Agenda by development programmes on gender

THIAGO GEHRE GALVÃO, VIRGÍNIA LAÍS DE ALMEIDA GONTIJO, AND ANA PAULA ANTUNES MARTINS, UNIVERSITY OF BRASÍLIA, BRAZIL

Drawing from Brazilian experiences on the implementation of the 2030 Agenda until 2019, this paper aims to critically analyse the development toolkit of international agencies and organisations, such as Britain's Prosperity Fund and United Nations Women, focusing specifically on how international development projects are designed to promote gender equality in Brazil. The main argument is that, when it comes to governmental institutions that do not have gender equality as its main focus, the institutional design – procedures and methodology of formulation, implementation and evaluation – built to implement gender inclusiveness and empowerment policies is instrumentalised in a 'cosmetic way', rather than providing substantial support to SDG 5 implementation. So, to comprehend the possible advantages and risks these development programmes present to territorialising the 2030 Agenda in Brazil depends both on identifying methodological gaps as well as mapping the role and interests of the social movements in order to shed some light on the clash between local and global conceptions of development. Drawing from International Relations scholars focusing on development theory, specially feminist authors on the role of women in development, and analysing programmes frameworks from United Nations Women and Prosperity Fund, this paper tries to understand that grey area between success and failure, between struggling not leaving 'no one behind', the silences and persistent gaps that arise from the global commitment in the 2030 Agenda. Moreover, this paper focus on the interlinkages that inform policy making and social movements strategies in Brazil to fill the gap left from government and provide evidence-based recommendations on how to resolve trade-offs, leverage synergies, and accelerate progress.

Poor education and precarious jobs in Peru: Understanding who is left behind and why

LORENA ALCÁZAR, MARIA BALARIN AND MICAELA BULLARD, GRUPO DE ANÁLISIS PARA EL DESARROLLO, PERU, AND SOUTHERN VOICE

Given the large inequalities that characterised Peru, fulfilling the 'Leave No One Behind', United Nations 2030 Agenda commitment might become its largest challenge to SDG implementation. In light of this, understanding who is left behind and why gains particular importance. The study uses a mixed methodological approach to provide a baseline of the left behind in Peru and construct detailed profiles of the excluded. We focus on SDG 4 (Quality Education) and SDG 8 (Decent Work) to identify which interest groups are most at risk of being left behind and what are the factors associated with their outcomes. We then conduct synergies and trade-offs analysis to observe the impact of educational underperformance on employment condition. Our diagnosis on youth exclusion in Peru finds that the left behind prevalently belong to marginalised groups, who are largely lagging in both access to quality work and quality education dimensions. Main markers of social exclusion are rurality, poverty, gender, and ethnicity. For example, poor, rural, indigenous girls are 91 percent more likely to be left behind in quality education than their wealthier, urban, non-indigenous peers. Our findings also suggest the existence of strong synergies between SDG 4

and SDG 8 for vulnerable Peruvians; being left behind in education at the ages of 12 and 15 significantly increase the probability of working precariously and being not in education, employment or training at age 22. These synergies become particularly apparent when looking at gender: women were three to five times more likely to be working precariously than men with the same educational attainment levels.

What does it mean to be left behind? A country-context perspective

IBRAHIMA HATHIE, INITIATIVE PROSPECTIVE AGRICOLE ET RURALE, SENEGAL, AND SOUTHERN VOICE

The commitment of the international community to leave no one behind is at the heart of the 2030 Agenda for Sustainable Development. It is about ending extreme poverty in all its forms, reducing inequalities and vulnerabilities, and ending group discrimination. Leave No One Behind means going beyond averages and ensuring that progress is made for all population groups on a disaggregated scale. This paper seeks to understand how exclusion looks like in a given country and what it means to be left behind. It relies on five dimensions of exclusion as a framework of analysis based on a select number of SDGs and country studies. The paper shows that exclusion is highly context dependent. For instance, although exclusion markers such as gender and ethnicity remain highly relevant, their meaning varies across contexts, resulting in specific implications and thus requiring targeted interventions. The severity of the conditions to which deprived groups are exposed are shaped by intersectionality, that is, individuals or groups suffering from compounded or overlapping disadvantages are most likely to be the furthest behind. The paper draws the following policy implications: Address overlapping disadvantages through a comprehensive development strategy; Contextualise and mainstream the principle of 'leave no one behind'; and Conceive a policy of territorial development that mainstreams spatial equity.

Weaving indigenous knowledge into local early action plans

LAURA LYNES, THE RESILIENCE INSTITUTE, CANADA

Meeting the SDGs requires transformative thinking and doing. To do this we must shred colonial ways that are imbedded deeply into policies and processes. But doing so requires both awareness and practice. This presentation and paper will show how through participatory community action initiatives – in close collaboration with Indigenous peoples – a process for developing Local Early Action Plans that weaves Indigenous and scientific knowledge serves to exemplify transformation in practice while advancing SDGs. In particular, the SDGs to reduce inequality (by co-developing knowledge and practices), climate action (in some of the world's most vulnerable communities), and in strong partnerships between different knowledge holders to achieve the goals. Case examples will be provided from initiatives in two First Nation communities in Canada, and from a collaborative with South African National Parks, the South African Agricultural Research Collaborative and the Nama peoples living adjacent to protected areas. The process for including Indigenous peoples in the design and delivery of Local Early Action Plans that these initiatives showcase is both replicable and scalable. Implications of this work could be beneficial to researchers and policymakers hoping to advance sustainable development goals through transformative ways of thinking and in weaving local knowledge with scientific findings.

Panel INCLUSIVENESS-4: Indicators for Inclusiveness

CHAIR: AGNI KALFAGIANNI, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: JOSHUA ALADE, NIGERIA YOUTH SDGs NETWORK, NIGERIA

TECHNICAL FACILITATOR: JOUK HOGENHUIS, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 14:00-15:30 UTC+2

'Leaving No One Behind' in local governance through goals

EMILY CLOUGH AND GRAHAM LONG, NEWCASTLE UNIVERSITY, UNITED KINGDOM

'Leave no one behind' is a fundamental principle of the 2030 Agenda for Sustainable Development. Even though this commitment to inclusiveness is integral to how the normative roadmap of the SDGs is to be understood – and thus to 'governance through goals' – it is variously missed or misunderstood in policymaking and review, perhaps because it is not itself one of the 17 SDGs. Our paper focuses on the application of this principle in city-level responses to the SDGs. We make two key claims. First, we argue that both existing indices comparing progress between cities – such as ongoing SDSN and OECD indicator sets – and current Voluntary Local Review reporting of progress within cities, systematically fall short of this commitment. Second, we draw on our ongoing work with the Greater London Authority to outline a more comprehensive and thoroughgoing approach to 'leave no one behind', through extensive disaggregation, including spatial; orienting indicator selection to detect disadvantage; supplementing with non-statistical data to capture statistically-invisible left behind groups; and participation and voice for these groups and their representatives. We reflect on the successes and challenges of this approach, and report on groups found to be left behind and ways in which they are left behind in the London context.

Making the invisible visible: Rationales and challenges of including indigenous perspectives in SDG indicators

SYLVIA KARLSSON-VINKHUYZEN, GERARD VERSCHOOR, DAVID LUDWIG, ESTHER TURNHOUT, AND PETER TAMAS, WAGENINGEN UNIVERSITY AND RESEARCH, THE NETHERLANDS

Thirty five percent of all land with low human impact, land that has retained diversity, is managed by Indigenous communities. The interests Indigenous Peoples take in and the perspectives they have on their land is, therefore, closely connected to SDG 14 (life below water) and 15 (life on land). The activities of Indigenous Peoples, either directly or through controlling access, shape those territories to the extent that they are legally and materially able. Top-down attempts to manage indigenous behaviours have been neither legitimate nor effective. The location and perspectives of those who live on this land, often recognised as indigenous and local knowledge, can matter deeply for decision-making and accountability. The perspectives of those who know the land best should be permanently woven into the practices of indication required to monitor implementation of for example SDG 14 and 15. This is not yet the case. Against this background we do three things in this paper. Firstly, we discuss the current SDG indicator efforts and their limitations from the perspective of indigenous and local knowledge. Secondly, we demonstrate how inclusion of indigenous and local knowledge is central to the development and sustained operation of SDG indicators. Thirdly, we describe some of the challenges that come with properly engaging indigenous and local knowledge systems in indication compatible with the SDGs. In all three of these steps we recognise dimensions that are fundamental to indigenous and local knowledge, such as the relational and spiritual, that are either not present in and/or very difficult for scientists to recognise. In essence, we discuss the relevance of and practices by which we may make the invisible visible.

Is the experience of human rights monitoring useful to developing a framework to assess the impacts of the SDGs?

ANDREA BOGGIO, BRYANT UNIVERSITY, UNITED STATES OF AMERICA

Indicators to measure human rights compliance have a long history. Building upon the experience of developing indicators for cultural rights, particularly the right to enjoy the benefits of scientific progress also known as 'right to science', and the work of UNESCO on scientific integrity, the paper explores two questions. First, is the framework developed by the United Nations Human Rights Council to monitor states' compliance with human rights useful in developing a framework to assess the impacts of the SDGs? Second, are the instruments developed to monitor the right to science useful in measuring the impacts of the SDGs? The paper shows that the answer to both questions is positive. Human rights indicators capture essential elements of the process that leads to achievement of a policy goal, and therefore provide insights as to what can and should be measured to determine the impacts of SDGs. Second, considerations of inclusions and non-discrimination are at the hearth of human rights standards and therefore the experience of monitoring human rights generate insights regarding inclusiveness. The paper also shows the limitations of the human rights indicators discourse, particularly its inability to capture interlinkages and deliver measurements that capture global phenomena in their integrity. The overall message though is that notwithstanding the limitations of the tools developed to monitor human rights compliance, that body of knowledge and practices provides useful insights on how to measure the effectiveness of global governance through goals.

Transformation or box-ticking? SDG 11 monitoring in Colombia

PHILIPP ULBRICH, JOÃO PORTO DE ALBUQUERQUE, AND JON COAFFEE, UNIVERSITY OF WARWICK, UNITED KINGDOM

The 2030 Agenda encourages governments at all levels to interpret the SDGs according to the development priorities at their level. The SDGs' conceptual openness and their targets aims at enabling locally meaningful and relevant implementation and promoting inclusiveness, specifically through participatory exercises. However, the extent to which SDGs are being localised meaningfully and representatively into monitoring mechanisms is not well understood with tensions emerging between different scales of action. The questions that then arise are how effective is the localisation of the SDG targets and indicators into monitoring frameworks at national and city levels and how well does this incorporate neighbourhood (sub-local) knowledge? Based on a review of voluntary local (municipal) review documents, and the case study of Colombia at the national level and Medellín at the city level where we analysed the practices of key stakeholders, the analysis investigates the methodological translation of the SDG 11 monitoring framework from the global to the city scale and assesses the implications of this translation in terms of inclusiveness and representativeness. By providing a new conceptual framework to analyse the localisation of SDG monitoring at city level based on empirical research, this analysis responds to calls for meta-analyses of anticipation and planning processes that question their transformative potential, especially regarding socio-spatial justice in earth system governance. The paper also focuses on the potential of novel methods of participatory research to inform new conceptual models of SDG localisation in ways that make it meaningful for citizens rather than just a score card system of bureaucratic box-ticking.

Panel INCLUSIVENESS-5: Building Sustainable Inclusion Through Participatory Processes: Insights from the Participate SDGs Research Network

CHAIR: JACKIE SHAW AND JO HOWARD, UNIVERSITY OF SUSSEX, UNITED KINGDOM

TECHNICAL FACILITATOR: NOA KLAPWIJK, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 16:00-17:30 UTC+2

Realities at the margins: Understanding and addressing intersecting inequalities through participatory dialogue and visual and narrative processes

JO HOWARD, UNIVERSITY OF SUSSEX, UNITED KINGDOM

This presentation discusses research which explored how understanding intersecting inequalities can inform inclusive practices to build collective action, with highly marginalised groups in Egypt, Uganda, South Africa, India and Ghana. This presentation focuses on the PAR processes used in each setting to uncover different as well as common experiences of inequalities, and the role of dialogue supported by visual, creative and narrative processes, to support individuals and groups to understand and negotiate these differences. Such processes can involve re-framing discriminatory social norms. The cases discuss iterative phases of building confidence within the group; deepening contextual understanding; promoting dialogue between citizens and duty-bearers; and developing working alliances between groups and agencies. These processes evolved slowly and iteratively, requiring careful attention to building trust and enabling constructive relational dynamics.

Commonality and difference: Building collective purpose without perpetuating marginalisation

JACKIE SHAW, UNIVERSITY OF SUSSEX, UNITED KINGDOM

This presentation continues the discussion in Presentation 1, focusing more deeply on how participatory processes can support marginalised groups to negotiate different and sometimes conflicting identities and experiences to build collective purpose. The processes discussed, used an intersectional lens as a political tool to support groups in identifying and carrying out actions. We discuss how community-led efforts may lead to fostering more accountable relationships. We also draw out lessons about how to navigate the intrinsic tensions between recognising difference and building community activism for accountability. Barriers to achieving progress towards the SDGs and in particular the inclusion of those 'left behind' are discussed.

STREAM IV: PLANETARY INTEGRITY

Panel PLANETARY INTEGRITY-1: Addressing Biodiversity Loss

CHAIR: DIMITRA MANOU, ARISTOTLE UNIVERSITY OF THESSALONIKI, GREECE

DISCUSSANT: KATHARINE RIETIG, NEWCASTE UNIVERSITY, UNITED KINGDOM

TECHNICAL FACILITATOR: NOA KLAPWIJK, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 9:00-10:30 UTC+2

Local solutions for global goals? The role of international actors in shaping nature-based solutions in Sub-Saharan African cities

KATHARINA ROCHELL, HARRIET BULKELEY AND HENS RUNHAAR, UTRECHT UNIVERSITY, THE NETHERLANDS

Recent literature and policy discourses suggest nature-based solutions as viable solutions to current societal problems. In urban areas, nature-based solutions can contribute to the SDGs by offering cost effective solutions for climate change mitigation and adaptation, as well as disaster risk reduction, while providing multiple co-benefits. Most academic work developed around nature-based solutions is of European or North American origin. Given the unprecedented urban growth in the Global South, it is necessary to better understand the governance of urban nature in different geographical contexts, based on robust empirical evidence. We argue that one difference in many sub-Saharan African cities as compared to Western contexts is the variety of different types of international actors that shape processes and outcomes of addressing urban sustainability challenges through nature-based solutions. Using a case study approach of three cities in south-eastern Africa, we first present the different types of initiatives, actor configurations and partnerships developed around urban nature which are generated by the presence of international actors. We then analyse the implications of the involvement of international actors and their specific agendas and seek to answer the question: Do the processes and outcomes for nature and society represent locally specific solutions for global sustainability goals that aspire to leave no one behind, or is there a friction between local and international agendas, potentially caused by planning control that drifted from the city to external sites and agenda setting? Conceptually, the paper combines the perspectives of urban environmental studies, urban governance and southern urbanism.

Getting closer to SDG 15? Evaluating the performance of biodiversity governance beyond the Convention on Biological Diversity using theories-of-change

OSCAR WIDERBERG, KATARZYNA NEGACZ, AND PHILIPP PATTBURG, VRIJE UNIVERSITEIT AMSTERDAM, THE NETHERLANDS

National governments have largely failed to halt biodiversity loss. Despite ambitious goals and targets set under the Convention on Biological Diversity, the state of biodiversity continues to deteriorate. Consequently, governments and other actors must take swift action to achieve SDG 15 of protecting terrestrial ecosystems and biodiversity. This paper focuses on how to evaluate global biodiversity governance beyond the Convention on Biological Diversity for reaching SDG 15. It analyses more than 300 cooperative initiatives for biodiversity (for example, international and transnational governance arrangements, public-private partnerships and private sector commitments), suggesting that while global biodiversity action is spreading fast, there is little knowledge about the impacts of international cooperative

initiatives for biodiversity. Subsequently, the paper suggests that the heterogeneity in collaborative actions calls for a variety of metrics for evaluating the performance and presents an assessment framework based on ‘theories-of-change’ for four ideal-type initiatives engaging in information sharing and networking, operations on the ground, standards and commitments and financing.

The 18th Sustainable Development Goal

INGRID VISSEREN-HAMAKERS, RADOUD UNIVERSITY, THE NETHERLANDS

This paper makes the case that animal concerns need to be integrated into the SDGs. Why are animal considerations neglected in our discussions on sustainable development – including on the SDGs on food, water, consumption and production, conservation and climate change? While the relationships between sustainable development and animal issues are highly complex, these debates have evolved in a rather disconnected manner. The paper argues for the integrative governance of sustainability and animal issues in order to avoid trade-offs and enable synergies between these two important priorities. By integrating the interests of the individual animal into the SDGs we can develop one overarching global guidance system on all aspects of sustainable development, including human, environmental and animal concerns.

Panel PLANETARY INTEGRITY-2: Protecting the Climate

CHAIR: RAKHYUN E. KIM, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: RIYANTI DJALANTE, UNITED NATIONS UNIVERSITY, JAPAN

TECHNICAL FACILITATOR: FABIENNE HORNEBANN, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 11:00-12:30 UTC+2

Synergies between the Paris Agreement and the SDGs in China and Mexico

CLARA BRANDI, GERMAN DEVELOPMENT INSTITUTE, GERMANY; AND PHOOSARAPHA THONGJUMROOL, UNIVERSITY OF DUISBURG-ESSEN, GERMANY

The paper focuses on the thematic connections between the Paris Agreement and the SDGs. The paper examines the national policy approaches in the context of countries’ Nationally Determined Contributions and their national development plans (for the implementation of the SDGs) through the lens of policy coherence. The paper focuses on China and Mexico, assesses to what extent there is coherence between their Nationally Determined Contributions and national development plans and what might explain differences in the degree of coherence in these contexts. Based on a detailed analysis of the selected countries’ Nationally Determined Contributions through the lens of the SDGs, the findings show that there are considerably more overlaps between the SDG-relevant content in the Nationally Determined Contributions and the SDG-relevant content in the national development plans in China than in Mexico, suggesting that the former case is thus characterised by stronger policy coherence than the latter and that it entails more potential for leveraging synergies. The paper then investigates what might explain the differences between the two cases by assessing countries’ relevant institutional context for implementation of SDGs and Nationally Determined Contributions and coordination across climate policies and policies for sustainable development as well as other elements of national governance mechanisms, including the nature of the countries’ political leadership. The paper finds that while China and Mexico might have similarly high indicators for coordination mechanisms, their pertinent institutional set-ups and political

leadership differ in relevant ways which becomes apparent once the analysis dives deeper into the details regarding the countries' institutional context

Two degrees and the SDGs: A network analysis of interlinkages between transnational climate actions and the SDGs

JOHANNA COENEN AND LISA-MARIA GLASS, LEUPHANA UNIVERSITY LÜNEBURG, GERMANY; AND LISA SANDERINK, VRIJE UNIVERSITEIT AMSTERDAM, THE NETHERLANDS

The year 2015 heralded the implementation of two major international agreements: The 2030 Agenda for Sustainable Development including the Sustainable Development Goals (SDGs), and the Paris Agreement on climate change. Given the interconnectedness of climate change and sustainable development, policymakers and scholars have started to investigate how climate actions can contribute to achieving the SDGs, and vice versa. To date, research has mainly focused on the national and international level, whereas little is known about the interlinkages between the two post-2015 agendas at the transnational level. Not only nation states, but also non-state and subnational actors undertake ambitious actions designed to cut greenhouse gas emissions and to promote sustainable development. By means of content analysis and network analysis techniques, we examine the interlinkages between climate actions of 72 transnational initiatives registered at the Non-State Actor Zone for Climate Action (NAZCA) and the 17 SDGs and 169 targets. We find that actions of 71 initiatives contribute to achieving 16 SDGs, thus generating valuable co-benefits. Besides SDG 13 on climate action and SDG 17 on partnerships, transnational climate actions frequently address SDG 9 (*industry, innovation and infrastructure*), SDG 7 (*energy*), and SDG 12 (*consumption and production*). While SDG 3 (*health*) and SDG 4 (*education*) are barely addressed, SDG 5 (*gender equality*) is not explicitly covered by transnational climate actions. Additionally, the network visualisation reveals that SDG 9 is highly synergistic with many other frequently addressed SDGs and functions as an important connector between them. Our results indicate that transnational initiatives fill a governance gap left by states with regards to consumption and production (SDG 12). Common themes that are present in both agendas, such as resilience or infrastructure, present a major opportunity for better aligning transnational climate actions and the SDGs in the future.

Panel PLANETARY INTEGRITY-3: Resilience, nature-based solutions, and the SDGs

CHAIR: FRANCESCO S. MONTESANO, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: BASIL BORNEMANN, UNIVERSITY OF BASEL, SWITZERLAND

TECHNICAL FACILITATOR: JANA BIRNER, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 16:00-17:30 UTC+2

Accelerating progress on heatwave resilience for sustainable development

ANA RAQUEL NUNES, UNIVERSITY OF WARWICK, UNITED KINGDOM

One of the major challenges we currently face are the risks from environmental changes and there is a need for concerted efforts to mitigate the impacts of such changes. One such effort concerns the implementation and achievement of the 2030 Sustainable Development Agenda. This study explores the prerequisites for strengthening resilience with a particular focus on heatwaves. It presents the links between achieving heatwave resilience and the SDGs. This study uses an interdisciplinary and intersectoral approach to

investigate best practices and options for mitigating heatwave-related health risks and impacts. Having the United Kingdom, as a case study, an exploratory qualitative research design is used. An array of stakeholders (that is, individuals, government, private sector, academia and civil society) were consulted to identify knowledge gaps, identify and explore opportunities for strengthening heatwave resilience, and achieving sustainable development. The findings signpost particular implementation and integration challenges, as well as links, interlinkages and interdependencies between resilience and the SDGs. Building on this we develop an agenda for linking heatwave resilience to all SDGs. The study argues that the SDGs represent a unique opportunity to focus the attention of different stakeholders onto strengthening resilience and improve governance. In doing so, we argue that it is vital to engage such stakeholders to develop, implement and assess policies to address the social, environmental, political, cultural and economic determinants of resilience for achieving the SDGs.

Cross-cutting implications of SDGs in coastal flood defence infrastructures

GERBEN DEKKER AND COR SCHIPPER, MINISTRY OF INFRASTRUCTURE AND WATER MANAGEMENT, THE NETHERLANDS

This research studies the level of sustainability of natural and nature-based flood defences on different geographical scales based on the Green Coastal Policy assessment framework. The framework considers an integral sustainability approach (People, Planet, Prosperity) with the use of coastal-relevant targets derived from the SDGs. The assessment quantitatively measures the level of sustainability of coastal infrastructure developments and allows comparison between locations and over a period of time. This means that the Green Coastal Policy framework stimulates coastal sustainability to minimise negative ecological and socio-economic impact, support coastal functions and maximise adaptation of the ecosystem to climate change. The assessment starts with beforehand demarcated coastal functionalities and the choice of coastal locations, then selects the appropriate SDG targets to connect these to selected parameters and publicly available data. The outcome of the assessment aims to optimise management and maintenance in such that it creates flood risk safety in an adaptable manner and moreover, to prove beneficial for the coastal ecology and economy. To showcase the framework, this study compares two sets of cases at different scales; five global coasts and deltas (Colombia, Vietnam, The Netherlands, the State of Louisiana, USA; and the State of Queensland, Australia) and five sand suppletion projects in the Netherlands. Results show variation in the sustainability values and applicability to evaluating policies with back or fore casting coastal related strategies. The outcomes of such assessment may lead to ongoing measures which can be used to stimulate the sustainable economic growth concerning e.g., flood risk and climate robustness.

National sustainability institutions as levers for implementing the global sustainability and climate goals

OKKA LOU MATHIS, GERMAN DEVELOPMENT INSTITUTE, GERMANY, MICHAEL ROSE AND JENS NEWIG, LEUPHANA UNIVERSITY LÜNEBURG, GERMANY

The effective implementation of the Agenda 2030 and the Paris Agreement on Climate Change depends on adequate steering structures at the national level and below. While some countries have tasked previously existing political bodies with these global goals, others have announced or created new ones only after their adoption in 2015. In this paper, I assess whether and how national sustainability institutions – such as councils, commissions or ombudspersons – around the world address the implementation of the global goals. The overarching research question is whether these institutions are formally ‘fit for purpose’. Methodologically, this paper rests on a descriptive analysis of sustainability institutions in a global comparative perspective, based on a dataset on institutions for sustainability and the future at the national polity level that is under preparation. I present empirical findings from parts of the analytical framework

that contribute to the following topics of the symposium: First, I illustrate different institutional set-ups for dealing with the implementation of the global goals around the world. National sustainability institutions can be both a decisive condition for the implementation of all goals and a direct response to SDG 16 and SDG 17. Second, national sustainability institutions can be tasked with mainstreaming, coordinating or planning sustainable development and climate action. I provide an overview of whether those institutions contribute to integrating different stakeholders from public to private actors. Third, I present findings on the level and type of participation that national sustainability institutions provide for as an operationalisation of inclusiveness in the process of implementing the global goals.

Panel PLANETARY INTEGRITY-4: Forests and the SDGs

CHAIR: IZABELA DELABRE, UNIVERSITY OF SUSSEX, UNITED KINGDOM

DISCUSSANT: ABBIE YUNITA, UTRECHT UNIVERSITY, THE NETHERLANDS

TECHNICAL FACILITATOR: BRANDON WHITLEY, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 16:00-17:30 UTC+2

Forests, food and the SDGs: Transforming production and consumption patterns in a post-2020 biodiversity framework

PEDRAM ROWHANJ AND IZABELA DELABRE, UNIVERSITY OF SUSSEX, UNITED KINGDOM

Humanity's unsustainable food production and consumption patterns are either directly or indirectly at the root of current trends in forest and biodiversity loss. International trade in high forest-risk commodity trade continues to grow to meet rising demand, continuing to raise pressure on forestlands and biodiversity. However, it is evident that policies and practices designed to shift society towards more sustainable and just food production and consumption patterns have so far been insufficient. In 2020, progress against many global sustainability goals will be missed, such as the Convention on Biological Diversity Aichi Targets related to production and consumption, and most 'zero deforestation' supply chain targets made by private sector actors. Although the SDGs acknowledge the need for transformative change, and explicitly address transnational production-consumption connections driving land use change, current trends indicate that SDG 15.2 on forests and sustainable forest management will not be met in 2020. In this paper, we examine the risks and opportunities that emerge when seeking alignment between the SDGs and the post-2020 biodiversity agenda under the Convention on Biological Diversity, and how this agenda can strengthen recognition of the need for more inclusive forms of SDG implementation and resource management. We reflect on how the post-2020 biodiversity framework can support bold actions to be taken across multiple levels to develop more transformative approaches to sustainable and equitable forest and biodiversity governance.

Have food supply chain policies improved forest conservation and rural livelihoods?

RACHAEL GARRETT, ETH ZURICH, SWITZERLAND

Recently, a growing number of food companies have adopted policies to influence their suppliers' forest conservation behaviours. These forest-focused supply chain policies are largely focused on SDGs 12 and 13. Many also have goals to help reduce poverty, contributing to SDG 1. Yet, it remains unclear whether such policies can contribute meaningfully to global climate action or poverty reduction goals. Some evidence

suggests that they may actually exacerbate rural inequality, undermining SDG 10. Here we provide a systematic review of the conservation and livelihood outcomes of forest-focused supply chain policies in the food sector and their ability to contribute toward various related SDGs. Results indicate that farms that supply directly to food traders and processors often comply with their policies. When forest-focused supply chain policies are coupled with positive incentives, such as improved prices, they often result in higher income from the targeted commodity. However, forest-focused rarely trigger behavioural changes that lead to improved conservation outcomes. If they do trigger behaviour changes, there is often a trade-off between conservation and livelihoods, since mechanisms that lead to more environmentally responsible production often decrease income, and vice versa. Our findings suggest that existing efforts to contribute to SDGs through supply chain policies tend to result in trade-offs between social and environmental SDGs. Variations in SDG outcomes are linked to pre-intervention land use practices and yields, local geospatial monitoring capacities, and farm and cooperative characteristics in the regions where the supply chain policies are implemented.

How can supply chain transparency and understanding contribute to achieving global zero-deforestation goals?

TIAGO N.P. DOS REIS, UNIVERSITE CATHOLIQUE DE LOUVAIN, BELGIUM

Halting deforestation is one key policy domain for which global goals are set, and which has potential ramifications for multiple SDGs, in particular SDG 15. Increasingly, commitments from private actors and supply-chain interventions are seen as critical to achieve global goals on halting deforestation, and other environmental, social and governance goals. Yet, key bottlenecks are that we still lack sufficient transparency in supply chains to monitor actual progress of companies' commitments, and understanding of the relations between supply chain actors and landscape where land use and deforestation occurs. Here, we use newly developed data from the Trase initiative (trase.earth) to analyse zero-deforestation commitments related to private companies and governments. We assess how these commitments fit with effectiveness criteria identified in recent studies, and how the Trase data allow monitoring the effectiveness of these commitments. We also use these data to introduce the notion of stickiness, that is, assessing how geographically stable are the relations within supply chains (e.g., between sourcing areas, traders, consumption countries...), and how this can play a role in the accountability and potential effectiveness of supply-chains interventions such as zero-deforestation commitments. We discuss these insights in regard to the SDGs, particularly SDG 15, related to land, but also others related to poverty, participation, and human rights. We also discuss potential reforms in zero-deforestation commitments to further align their outcomes with the SDGs.

STREAM V: INDICATORS AND METHODS

Panel INDICATORS AND METHODS-1: Knowledge in SDG Implementation

CHAIR: MAGALI BROSIO, UNIVERSITY OF BIRMINGHAM, UNITED KINGDOM

DISCUSSANT: RIANNE C. TEN VEEN, STICHTING ISLAMIC REPORTING INITIATIVE, THE NETHERLANDS

TECHNICAL FACILITATOR: MARIJN KALLENBERG, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 11 JUNE, 16:00-17:30 UTC+2

Global enterprise of local knowledge on development: An evaluation model for overcoming the technical, political and systematic challenges of the Sustainable Development Agenda

ATAL AHMADZAI, UNIVERSITY OF ARIZONA, UNITED STATES OF AMERICA

A sense of urgency has developed to step up efforts towards the realisation of the 2030 Agenda. Latest assessments have called for an urgent change of course in the implementation of the Agenda. Challenges associated with the evaluation function of the Agenda are threatening its successful implementation. Technical challenges and political sensitivities impede the practicality of the evaluation, thereby off-tracking progress towards the realisation of the goals. The lack of relevant technical resources (human and material) at national and international levels, underdeveloped data systems in the developing world, the lack of non-DAC aid data; and problems of operationalisation of some of the new goals and targets are the main technical challenges. Weak political-will at national levels to drive development towards sustainability introduces new political challenges to evaluate the implementation of Agenda. This commentary explores these challenges and it reveals that the existing national and international evaluation mechanisms are not responsive and are inadequate to render the 2030 Agenda inclusive and transformational. To overcome this, the commentary proposes the 'Global Enterprise of Local-Knowledge on Development', a collaborative evaluation model. It advocates for the incorporation of local knowledge to eventually transform comprehensions and operationalisations of development. The model proposes mandating local educational institutions to continuously engage at grassroots levels to synthesise local reviews and channel them upwards to national and global levels. Essentially, the model is characterised by establishing horizontal and bottom-up vertical flows of information and knowledge.

What can knowledge co-production offer to the implementation of the SDGs in African cities?

KATSIA PAULAVETS, INTERNATIONAL SCIENCE COUNCIL, FRANCE; KAREEM BUYANA, MAKERERE UNIVERSITY, UGANDA; ALICE McCLURE, UNIVERSITY OF CAPE TOWN, SOUTH AFRICA; TOLU ONI, UNIVERSITY OF CAMBRIDGE, UNITED KINGDOM; JUSTIN VISAGIE, HUMAN SCIENCES RESEARCH COUNCIL, SOUTH AFRICA; SYLVIA CROESE, UNIVERSITY OF CAPE TOWN, SOUTH AFRICA; AMOLLO AMBOLE, UNIVERSITY OF NAIROBI, KENYA; PHILIP OSANO, STOCKHOLM ENVIRONMENT INSTITUTE AFRICA, KENYA; AND MABEL NECHIA WANTIM, UNIVERSITY OF BUEA, CAMEROON

The 2030 Agenda with its SDGs recognises the critical role of cities in societal transformation towards sustainable development. With the fastest urbanisation rates in the world, African cities are at the frontline of the global responses to future global development. Given that the bulk of urbanisation in Africa has not yet taken place, African cities have an unprecedented opportunity to shape their urban futures in a more

inclusive, sustainable and resilient manner. The decisions being taken now by governments at different levels will have consequences for the functioning, liveability and environmental sustainability of their cities for decades to come. Making a meaningful contribution to the sustainable urban development on the continent will require inclusive and coordinated policies, strategies and actions, which should be based on context-specific evidence and nuanced analysis of urban processes. To stimulate and deliver the new evidence required to implement the SDGs across African cities, the International Science Council is running a research funding programme, Leading Integrated Research for Agenda 2030 in Africa. The distinctive feature of the programme is that it supports collaborative transdisciplinary research led by African early-career scientists in partnership with local communities, policy and practice. This intervention will shed light on: what it takes to co-produce transdisciplinary knowledge on SDGs in African cities through collaboration with different stakeholders; opportunities that knowledge co-production process offers in relation to the implementation of the SDGs; and options for creating enabling environments and enhancing the capacities of African scientists to undertake this type of research.

The use of computer-based tools to support policy coherence and systemic thinking in the implementation of the 2030 Agenda: experiences with the SDG synergies tool in Colombia

IVONNE LOBOS, EFRAIM HERNANDEZ, AND MARIO CÁRDENAS, STOCKHOLM ENVIRONMENT INSTITUTE LATIN AMERICA, COLOMBIA

SDG implementation requires systemic thinking and actions that harness synergies and minimise trade-offs. Approaches and tools are needed to support more systemic thinking and to facilitate the understanding of complex and interconnected issues. The SDG Synergies Tool is based on a decision-support approach designed to guide priority-setting and policy coherence amongst key stakeholders. It aims to support decision-making processes that deal with multiple and often interlinked targets, such as with the SDGs. The methodology uses cross-impact analysis and a 7 point-scale to score interactions – the most positive linkages are scored as +3, while the most negative are -3. This scoring allows to identify trade-offs and synergies. Scoring is accompanied by a network analysis that helps to identify second order interactions and clusters. The SDG Synergies tool, developed by SEI Latin America, speeds up this process, as it provides a user-friendly interface and allows the scoring of interactions in an online matrix – the web platform then creates graphics that enable a quick visualisation of results. The tool allows time-efficient analysis to support decision-making and systemic thinking in a learning-by-doing way. This paper will present the results of applying the SDG Synergies Tool with a broad set of stakeholders in two case studies in Colombia. It will propose a discussion about the implications of using web-based tools in promoting policy coherence and in fostering systemic thinking amongst stakeholders, along with ideas for future tool development and uses.

Greater gains for countries on the SDGs by addressing all goals together: Experience from the iSDG-Australia system dynamics model

CAMERON ALLEN, GRACIELA METTERNICHT, THOMAS WIEDMANN, UNIVERSITY OF NEW SOUTH WALES, AUSTRALIA; AND MATTEO PEDERCINI, MILLENNIUM INSTITUTE, SWEDEN

The 2030 Agenda and the SDGs define an ambitious action plan for the 'future we want' but say little about implementation. Several recent studies highlight that trade-offs between SDG targets may undermine their achievement. Significant gaps remain in scenario frameworks and modelling capabilities to better understand these interlinkages. Our new research published in Nature Sustainability applies national scenario analysis and system dynamics modelling to explore the complex interlinkages, future uncertainty, and transformational change that are inherent in the goals. We develop a novel approach nesting national SDG scenario modelling within the global Shared Socioeconomic Pathways, selecting Australia as a use case. The research applies an integrated assessment model developed for the study (iSDG-Australia model) to

project four alternative scenarios adopting different development approaches: Growth at all Costs; Green Economy; Inclusive Growth; and Sustainability Transition. We find that Australia is off-track to achieve the SDGs by 2030, however significant progress is possible by altering Australia's development trajectory. A 'Sustainability Transition' comprising a coherent set of policies and investments delivers rapid and balanced progress of 70 percent towards SDG targets by 2030, well-ahead of the Business-as-Usual scenario (40 percent). A focus on economic growth, social inclusion or green economy in isolation foregoes opportunities for greater gains. However, future uncertainty and cascading risks could undermine progress, and closing the gap to 100 percent SDG achievement will be very challenging. This will likely require a shift from 'transition' to 'transformation'.

Panel INDICATORS AND METHODS-2: Innovative Methods towards Transformative Pathways

CHAIR: ALEXEI TRUNDLE, UNIVERSITY OF MELBOURNE, AUSTRALIA

DISCUSSANT: DAVID COLLSTE, STOCKHOLM RESILIENCE CENTRE, SWEDEN

TECHNICAL FACILITATOR: VERA BEKKERS, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 11:00-12:30 UTC+2

Co-designing bottom-up pathways for the SDGs: Lessons learned from two multi-stakeholders scenario development workshops in France

COSMA CAZÉ AND VINCENT VIRAT, FUTURE EARTH, FRANCE; NATHALIE HERVÉ-FOURNEREAU AND ALEXANDRA LANGLAIS, FRENCH NATIONAL CENTRE FOR SCIENTIFIC RESEARCH, FRANCE AND INSTITUT DE L'OUEST: DROIT ET EUROPE, FRANCE; PASCAL MARTY, ÉCOLE NORMALE SUPÉRIEURE DE LYON, FRANCE; YVAN RENOU, GRENOBLE ALPES UNIVERSITY, FRANCE; DENIS SALLES AND ERIC SAUQUET, FRENCH NATIONAL RESEARCH INSTITUTE FOR AGRICULTURE, FOOD AND THE ENVIRONMENT, FRANCE; AND MARJA SPIERENBURG, LEIDEN UNIVERSITY, THE NETHERLANDS

Given that the world only has one decade left to achieve the SDGs, there is an urgency to design sustainability pathways based on the best available science from a wide range of knowledge holders. This has prompted Future Earth to launch the Science-Based Pathways for Sustainability initiative. Its first phase focuses on the design of national sustainability pathways employing transdisciplinary approaches to engage multiple stakeholders (scientists, policymakers, civil society and the private sector). For each national process, the initiative selects an overarching objective for 2030 surrounding one of the four Life-Supporting SDGs (freshwater, ocean, land and climate) as a starting point (for example, no net loss of biodiversity by 2030), and then designs micro-scenarios for the other SDGs (for example, on cities, agriculture and energy) that allow to reach the 2030 objective. To align societal goals with a resilient earth system, each SDG micro-scenario addresses interactions with the 2030 objective. Two pilot multi-stakeholder workshops were held in France in 2019 on biodiversity and freshwater. The paper explores the lessons learned from this first phase and includes reflections on the methods used for co-creating qualitative and normative scenarios and pathways, where France has a particular expertise (three lines of inquiry: participatory scenario development, SDG interaction assessment and transformations analysis); how the approach addresses cross-scale interactions; and governance and transformations for France to answer the question 'How can stakeholders work with scientists to move from globally defined goals to concrete transformative options at the country level?'

Scenario thinking in localising the Global Goals: Pathways towards sustainable futures and 'Leaving No One Behind'

NANA O. BONSU, JENNIFER TYREE HAGEMAN, AND JULIET KELE, UNIVERSITY OF BIRMINGHAM, UNITED KINGDOM

Studies examining pathways mainstreaming the SDGs within societies at the local level are very limited, especially, mechanisms useful addressing issues such as climate change, air pollution, inequality and sustainable consumption patterns. With only ten years left for the international community to achieve the SDGs, the role of youth remains integral, as they are the heartbeat of most economies for example driving markets; becoming future business leaders; deciding on political leaders, and are the ones who have to live with the consequences of humankind impact on the planet and future generations. Consequently, a different approach harnessing SDGs implementation at the local level becomes crucial towards sustainable futures. Using an example from the United Kingdom – focusing on youth in secondary education – we present a novel mechanism to achieve this. Scenario thinking through knowledge cafés, experts' facilitation and normative scenario techniques was applied to explore pathways to harness local-level SDGs planning and implementation. Discussions in groups with students from interdisciplinary backgrounds created desired future SDGs images focusing on three challenging areas confronting the United Kingdom and the world at large. Desired scenarios addressed: the type of air we breathe and combating climate change; ensuring sustainable consumption patterns; and addressing inequality issues. The central question answered was on measures ensuring leaving no one behind by 2030 – regarding people, protecting the environment whilst businesses make profits. The study highlights that lack of SDGs knowledge and governance frameworks persist due to structural issues such as weak stakeholder engagement. The need for SDG Nexus interactions and more bottom-up capacity-building are highlighted.

A causal systems model to understand synergies and trade-offs among SDGs

CARL ANDERSON, UNIVERSITY OF BONN, GERMANY AND UNIVERSITY OF GLASGOW, UNITED KINGDOM; MANFRED DENICH, UNIVERSITY OF BONN, GERMANY; ANNE WARCHOLD, JÜRGEN KROPP, AND PRAJAL PRADHAN, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

Achieving the SDGs by 2030 requires assessing interactions, monitoring progress, and designing policy from a systems perspective. Efforts towards achieving a goal or target can often create synergies and thus leverage progress towards achieving others. Additionally, trade-offs also emerge given persisting development paths. Past research has explored interactions among SDGs using quantitative approaches, qualitative frameworks, and expert knowledge. However, mixed-methods that go beyond first order interactions and consider feedback processes are lacking. We create a causal SDG systems model by using a correlation analysis of SDG indicator data with literature research and expert knowledge. The causal influence of targets and goals on the overall objective of achieving SDGs is assessed. SDGs 3 (Good Health and Well-being), 5 (Gender Equality), and 17 (Partnerships for the Goals) show the most synergy potential, while SDGs 10 (Reduced Inequalities) and 16 (Peace, Justice and Strong Institutions) are shown to create the most trade-off potential. However, influence at target level varies greatly within each goal, with the top three synergy targets (5.5, 17.8, 17.6) and trade-off targets (16.8, 10.6, 15.5) representing four different goals, respectively. Persisting trade-offs must be recognised and overcome in the long-term, while efforts towards leveraging gender equality (SDG 5) and partnerships (SDG 17) can produce multiplied benefits.

Panel INDICATORS AND METHODS-3: Towards New Research Frameworks

CHAIR: MAYA BOGERS, UTRECHT UNIVERSITY, THE NETHERLANDS

DISCUSSANT: SANDRA VAN DER HEL, UTRECHT UNIVERSITY, THE NETHERLANDS

TECHNICAL FACILITATOR: KARIANNE TARANGER, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 16:00-17:30 UTC+2

Transformative outcomes: Assessing and reorienting experimentation with transformative innovation policy

JOHAN SCHOT, UTRECHT UNIVERSITY, THE NETHERLANDS; BIPASHYEE GHOSH, UNIVERSITY OF SUSSEX, UNITED KINGDOM; PAULA KIVIMAA, FINNISH ENVIRONMENT INSTITUTE, FINLAND; AND JONAS TORRENS, UTRECHT UNIVERSITY, THE NETHERLANDS

The United Nations Agenda 2030 is a significant departure from current development pathways, in a vision outlined as a complex set of goals and indicators. Pursuing that vision rapidly stretches the routines and rationales of governance and incites the reconfiguration of multiple systems of provision. To meet such provocation, science funders, innovation agencies and scholars have explored a novel framing of transformative innovation policy. It promotes directionality in innovation efforts, coordination across multiple policy domains, and adaptive forms of implementation. Thus, varied forms of experimental policy engagements have gained prominence as a way of inducing more systemic forms of innovation, ranging from highly controlled experiments via policy labs to experimental cultures. Yet, how and in which circumstances these are transformative remains underexplored. This presentation proposes an approach of transformative outcomes, to assess the transformative potential of innovation policy in general and experimental policy engagements specifically. It builds on sustainability transitions literature and work of the Transformative Innovation Policy Consortium. This effort aims to redress the narrow focus on upscaling of experiments, and to build tools that support the ongoing evaluation and conduct of these engagements. Two cases are used as illustrations: the Colombian coffee sector and the Finnish mobility transition. Experimentation can engender relevant dynamics of learning, coordination and resource mobilisation neglected in output-centric forms of evaluation, which take long to manifest. Considering the transformative outcomes of experiments as intermediary assessment and reflection tools can facilitate the governance and attainment of the SDGs.

Analysing interactions among SDGs with integrated assessment models

HELEEN L. VAN SOEST, PBL NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY, THE NETHERLANDS; DETLEF P. VAN VUUREN, PBL NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY AND UTRECHT UNIVERSITY, THE NETHERLANDS; JÉRÔME HILAIRE, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY; JAN C. MINX, MERCATOR RESEARCH INSTITUTE ON GLOBAL COMMONS AND CLIMATE CHANGE, GERMANY, AND UNIVERSITY OF LEEDS, UNITED KINGDOM; MATHIJS J.H.M. HARMSSEN, PBL NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY, AND UTRECHT UNIVERSITY, THE NETHERLANDS; VOLKER KREY, INTERNATIONAL INSTITUTE FOR APPLIED SYSTEM ANALYSIS, AUSTRIA; ALEXANDER POPP, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY; KEYWAN RIAHI, INTERNATIONAL INSTITUTE FOR APPLIED SYSTEM ANALYSIS, AUSTRIA; AND GUNNAR LUDERER, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

To achieve all SDGs by 2030, it is necessary to understand how they interact with each other. Integrated assessment models represent many human–environment interactions and can inform policymakers about the synergies and trade-offs involved in meeting multiple goals simultaneously. We analyse how integrated assessment models, originally developed to study interactions among energy, the economy, climate, and

land, can contribute to a wider analysis of the SDGs in order to inform integrated policies. We compare the key interactions identified among the SDGs in an expert survey, with their current and planned representation in models as identified in a survey among modellers. We also use text mining to reveal past practices by extracting the themes discussed in the literature on integrated assessment models, linking them to the SDGs, and identifying the interactions among them, thus corroborating our previous results. This combination of methods allowed us to discuss the role of modelling in informing policy coherence and stimulate discussions on future research. The analysis shows that integrated assessment models cover the climate SDG well, but most integrated assessment models also cover several other areas that are related to resource use and the earth system. Some other dimensions of the 2030 Agenda are also covered, but socio-political and equality goals, and others related to human development and governance, are not well represented. Some of these are difficult to capture in models. Therefore, it is necessary to facilitate a better representation of heterogeneity (greater geographical and sectoral detail) by using different types of models (for example, national and global) and linking different disciplines (especially social sciences) together. Planned developments include increased coverage of human development goals and contribute to policy coherence.

Mobilising the transformative power of the research system for achieving the SDGs

MATIAS RAMIREZ, UNIVERSITY OF SUSSEX, UNITED KINGDOM, OSCAR ROMERO AND JOHAN SCHOT, UTRECHT UNIVERSITY, THE NETHERLANDS, AND FELBER ARROYAVE, UNIVERSITY OF CALIFORNIA, MERCED, UNITED STATES OF AMERICA

This paper addresses the important question of how national research systems can support the implementation of the United Nations 17 sustainable development goals (SDGs) set out in the 2030 agenda. Much attention on this topic has so far coalesced around understanding and measuring possible synergies and trade-offs that emerge in the SDGs. We contribute to this discussion by arguing that it is necessary to move from a focus on system interaction towards system transformation. A conceptual approach is presented based on the notion that research that ‘builds bridges’ between science and technology and the social and environmental pillars of sustainable development can more fully support simultaneous achievement of the SDGs and thus be transformational. This proposition is put to the test empirically through a study of the Mexican research system using methods from bibliometrics and social network analysis. Our results can help to provide a diagnostic of how research systems are approaching SDGs and where potential exists for transformative research.

Linking mitigation of climate change and the SDGs: Modelling integrated sustainable development pathways

BJOERN SOERGEL, ELMAR KRIEGER, NICO BAUER, BENJAMIN BODIRSKY, ALOIS DIRNAICHNER, MARIAN LEIMBACH, ALEXANDER POPP, AND ISABELLE WEINDL, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

With the adoption of the Paris Agreement and the SDGs, an ambitious agenda for fostering human development and respecting ecological boundaries has been set. This urgently calls for modelling integrated pathways that make use of synergies and avoid trade-offs between these targets wherever possible. While previous analyses with integrated assessment models have already studied interlinkages between climate change and certain SDGs, the focus has mostly been on the water-energy-land nexus. On the other hand, distributional consequences of both climate change and mitigation policies – within and between countries – have remained underexplored. However, these consequences crucially affect outcomes for several SDGs, most notably for SDG 10 (‘reduce inequality’) and SDG 1 (‘end poverty’), but also for SDG 2 (‘end hunger’) and SDG 7 (‘energy access’). Here we present a sustainable development pathway that for the first time addresses these questions in an integrated and quantitative way. Our pathway is computed with the energy-

economy-land-use modelling framework REMIND/MAGPIE and combines a 1.5°C scenario with various additional sustainability and equity measures. For SDG indicators that are not directly represented within our integrated assessment framework we evaluate outcomes using a detailed post-processing with data-driven models. We also include the option to use the revenues from carbon pricing for progressive redistribution policies. Our combination of ambitious climate policy with sustainability and equity measures would lead to substantial progress along all dimensions of the SDG agenda. However, we also find that fully achieving certain SDGs by 2030 remains a challenge.

Panel INDICATORS AND METHODS-4: Indicators for Assessing Progress towards SDGs

CHAIR: RIANNE C. TEN VEEN, STICHTING ISLAMIC REPORTING INITIATIVE, THE NETHERLANDS

TECHNICAL FACILITATOR: VERA BEKKERS, UTRECHT UNIVERSITY, THE NETHERLANDS

TIME: 10 JUNE, 16:00-17:30 UTC+2

Monitoring SDGs: How selection of indicators matters?

PRATIBHA THAPA, PRAJAL PRADHAN, AND JÜRGEN KROPP, POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH, GERMANY

Almost five years have been passed since the United Nations adopted the SDGs. Still, a unified framework to monitor progress on SDGs is missing. Mainly, SDG databases from United Nations Statistics Division, World Bank Development Indicators, and SDSN are being used in SDG research. Here, we compare the SDG database from the United Nations Statistics Division and the World Bank Development Indicators to understand how the selection of data affects our understanding of the SDG interactions. This is important because SDGs are a system of interacting component instead of just a collection of goals, targets, and indicators. To analyse the SDG interactions, we statistically investigate synergies and trade-offs among SDGs at global and regional scales using both databases. Our results highlight that we gain more differences than similar insights on SDG Interactions using different databases. For example, SDG 10 (Reduced Inequalities) mostly shows synergistic relations with other goals based on World Bank Development Indicators database, however, this goal is mostly antagonistic with others when we consider UNSD database. Similarly, SDG 16 (Peace, Justice and Strong Institutions) and SDG 14 (Life below Water) show mostly antagonistic relations with other goals based on the United Nations Statistics Division and World Bank Development Indicators databases, respectively. These results highlight the need for a unified framework to monitor SDGs because the use of different databases can lead to different policy recommendations in terms of leveraging the synergies and making trade-offs non-obstructive to meet the 2030 Agenda.

When do development data count?

DAN BROCKINGTON, UNIVERSITY OF SHEFFIELD, UNITED KINGDOM

The SDGs are a golden opportunity for data-driven policy to thrive. The specificity of the goals, their indicators and targets and the acute attention given to different ways of progress to them have helped to usher in a new boom in development data. However, the history of the use of data in development means that we must be sanguine about the potential for change. There are some aspects of development and development goals which are tightly tied to data. And other aspects of development policy seem to be relatively inured from the restrictions of data-driven policy. In this paper I reverse the normal way of looking at data and development. The normal question is 'how can good data better inform development policy'. I

ask in what circumstances do development policies become responsive to data, and in which circumstances are they unresponsive. I explore these issues with reference to a variety of different goals and policies.

Knowledge of SDGs interlinkages for decision-making: Are current methods fit for purpose?

LORENZO DI LUCIA, CHALMERS UNIVERSITY OF TECHNOLOGY, SWEDEN; LARS NILSSON AND JAMIL KHAN, LUND UNIVERSITY, SWEDEN; AND RAPHAEL SLADE, IMPERIAL COLLEGE LONDON, UNITED KINGDOM

Due to the interconnectedness of the SDGs, the potential to meet a specific goal is influenced by efforts to achieve other goals. To maintain the indivisibility of the 2030 Agenda, a growing number of methods and approaches have been developed in recent years to provide knowledge of SDG interlinkages in the form of trade-offs and synergies. In this paper, we take stock of the rapid development which has characterised the field and conduct a critical review of existing approaches. The exercise consists of a review of the scientific and grey literature, and an expert workshop bringing together both developers and users. The workshop, conducted in Sweden in spring 2020, brings together a selected group of developers, representing some of the most known approaches, and a broad range of potential knowledge users including decision makers from businesses, NGOs, local/national public authorities and practitioners (for example, consultancies). The results of the study highlight the existence of both methodological and conceptual challenges that are relevant to the empirical analysis of SDG interlinkages. Moreover, it confirms that for knowledge of SDG interlinkages to effectively contribute to decision making, methods need to not only account for contextual specificity of interlinkages and issues related to trans-boundary effects, but also find ways to address challenges emerging from power and governance structures. This understanding of the limitations of current methods is crucial to improve their analytical validity and use in decision making contributing to the use(fullness) of 2030 Agenda as a means of national and global governance.

LIST OF REGISTERED PARTICIPANTS

The following list includes all formally registered participants in the GLOBALGOALS2020 symposium. Many more participated in the conference through the webstreams and YouTube channels.

Abbas, Tahira	RCE Greater Portland, United States of America
Abhisinha, Nintira	Bangchak Corporation Public Company Limited, Thailand
Adhikari, Shankar	Ministry of Forests and Environment, REDD Implementation Centre, Nepal
Adipudi, Ashok Vardhan	Indian Institute of Technology, Kharagpur, India
Agbo, Chinonso	Sabiagriik Ltd, Nigeria
Agouzoul, Hassan	Economic, Social and Environmental Council, Morocco
Agterhof, Gerjan	Woord en Daad / Building Change, The Netherlands
Agustina, Neli	Politeknik Statistika STIS Jakarta, Indonesia
Ahmadzai, Atal	University of Arizona, United States of America
Aja, Daniel	University of Cape Coast, Ghana
Akbar, Aulia	ITC Faculty, University of Twente, The Netherlands
Åkerman, Ann	Lund University Centre for Sustainability Studies, Lund University, Sweden
Akhtar-Khavari, Afshin	Queensland University of Technology, Australia
Alade, Joshua	Nigeria Youth SDGs Network, Nigeria
Alcázar, Lorena	GRADE, Peru
Alghamdi, Areej	13th high school, Saudi Arabia
Allen, Cameron	UNSW and Monash University, Australia
Altink, Henrice	University of York, United Kingdom
Amasya Anzilni, Fathia	Mizuho, Indonesia
Amisi, Victor	Vision GRAM-International, Canada and RD Congo
Anderson, Carl	University of Glasgow, United Kingdom
Andersson, Claudia	Göteborg University, Sweden
Ankinun, Pawana	Phetchaburi Rajabhat University, Thailand
Anshari, Gusti	Universitas Tanjungpura, Indonesia
Antunes Martins, Ana Paula	University of Brasilia, Brazil
Areesophonpichet, Sorngate	Chulalongkorn University, Thailand
Argatta, Andrian	Universitas Indonesia, Indonesia
Arias-Navarro, Cristina	INRAE, France
Arndt, Edith	University of Bielefeld, Germany
Arteaga, Estefania	Griffith University, Australia
Ásgeirsdóttir, Áslaug	Bates College, United States of America
Auz, Juan	Hertie School, Germany

Awohouedji, Emmanuel	Sanus NGO, Benin
Azam, Muhammad	Global Citizenship Academy, Pakistan
Bacchetti, Elizabeth	Monash University, Australia
Baesel, Klaus	German Agency for International Cooperation, Germany
Bagalkoti, Siddappa	Karnatak University Dharwad, India
Ballard, Charlotte	Utrecht University, The Netherlands
Bansard, Jennifer	University of Potsdam, Germany
Barber, Jeffrey	Integrative Strategies Forum, United States of America
Barnes-Dabban, Harry	Ports Environmental Network-Africa, Ghana
Barreto, Ana	AfroResistance, United States of America
Barrieault, Justin	RCE Greater Portland – GPSEN, United States of America
Barros, Helena	ENGCONSULT, Angola
Barua, Monmi	The Energy and Resources Institute, India
Bastos Lima, Mairon	Chalmers University of Technology, Sweden
Baver, Sherrie Baver	CUNY, United States
Begby, Line	Viken County Council, Norway
Behre, Eike	United Nations University – Institute for Environment and Human Security, Germany
Beisheim, Marianne	German Institute for International and Security Affairs, Germany
Bekkers, Vera	Utrecht University, The Netherlands
Bellorini, Arellys	World Vision, United States of America
Berar Awad, Azita	Graduate Institute of International and Development Policies, Switzerland
Berdejo Espinola, Violeta	University of Queensland, Australia
Bermudez, Tatiana	University of Campinas, Brazil
Bernstein, Steven	University of Toronto, Canada
Bexell, Magdalena	Lund University, Sweden
Bhattacharya, Debapriya	Centre for Policy Dialogue and Southern Voice, Bangladesh
Biermann, Frank	Utrecht University, The Netherlands
Bilalova, Shahana	ADA University, Azerbaijan
Biondi, Alejandro	CIPPEC, Argentina
Birner, Jana	Utrecht University, The Netherlands
Bogers, Maya	Utrecht University, The Netherlands
Boggio, Andrea	Bryant University, United States of America
Boland, Nienke	Utrecht University, The Netherlands
Bolt, Wilfried	PGGM, The Netherlands
Bonsu, Nana	Birmingham Business School, University of Birmingham., United Kingdom
Borges, Vag-Lan	Secretary of Agricultural Development, Brazil
Borghart, Sven	Utrecht University, The Netherlands

Bornemann, Basil	University of Basel, Sustainability Research Group, Switzerland
Boschen, Bettina	Utrecht University, The Netherlands
Bosi, Moreira Bruna	University of Duisburg-Essen and University of Brasilia, Germany and Brazil
Boston, Daniel	University of Groningen, The Netherlands
Botchwey, Brianna	University of Toronto, Canada
Boyd, Emily	Lucsus, Sweden
Braams, Rik	Utrecht University, The Netherlands
Brand, Veronica	Religious of the Sacred Heart of Mary, United States of America
Brandi, Clara	German Development Institute / Deutsches Institut für Entwicklungspolitik, Germany
Brants, Marius	WWF-NL, The Netherlands
Bray, Bryce	Miis, United States of America
Bree, Zouréna	Leoclub Gado-tjo, Suriname
Breitmeier, Helmut	Justus Liebig University Gießen, Germany
Breuer, Anita	German Development Institute / Deutsches Institut für Entwicklungspolitik, Germany
Brockington, Dan	Sheffield Institute for International Development, United Kingdom
Brogaard, Sara	Lund University, Sweden
Brosio, Magali	University of Birmingham, United Kingdom
Brou, Gnangon Georgette	Université Peleforo Gon Coulibaly de Korhogo, Côte d'Ivoire
Buchhave, Cecilie Olivia	Lund University, Sweden
Budthime, K	Kmutt, Thailand
Bunnag, Chol	SDG Research and Support Programme (SDG Move), Faculty of Economics, Thammasat University, Thailand
Bunyagidj, Chaiyod	Thai SCP network, Thailand
Burns, Wil	Institute for Carbon Removal Law and Policy, United States of America
Bush, Judy	The University of Melbourne, Australia
Büttner, Leonie	Helmholtz Centre for Environmental Research, Germany
Callewaert, Simon	Federal Institute for Sustainable Development, Belgium
Camara, Jean Jerome	MOVENDI International – Mali, Mali
Caprazli, Kafkas	FAO of the United Nations, Ethiopia
Cárdenas, Mario	Stockholm Environment Institute, Colombia
Carneiro, Cibebe	Porto Alegre City Hall, Brazil
Carrard, Naomi	University of Technology Sydney, Australia
Carvalho, Denise	RSM and Erasmus University, Brazil
Cashore, Benjamin William	National University of Singapore, Singapore
Castro de Souza, Marcio	Food and Agriculture Organization of the United Nations, Italy
Cazé, Cosma	Future Earth, France
Censoro, Jecel	Newcastle University, United Kingdom

Chaikuntaveechot, Pirasinee	Songkhla Rajabhat University, Thailand
Chaithong, Thapthai	Kasetsart University, Thailand
Chan, Charlotta	Earth Innovation Institute, United States of America
Chao, Chia-Wei	Risk Society and Policy Research Center, Taiwan
Chasek, Pamela	Manhattan College, United States of America
Checa, Andrés	University of Gießen, Germany
Chenet, Romain	University of Warwick, United Kingdom
Chinnakum, Warattaya	Faculty of Economics, Chiang Mai University, Thailand
Chisari, Lucia	Hogeschool Utrecht, The Netherlands
Chitapornpan, Sukhuma	University of Phayao, Thailand
Chong, Xing Yuan	The Global Citizen, Singapore
Choochouy, Nattagorn	Faculty of Public Health, Thammasat University, Thailand
Chotova, Plamena	Utrecht University, The Netherlands
Chotte, Jean-Luc	IRD, France
Christen, Marius	University of Basel, Switzerland
Chunhachoti-Ananta, Supot	International College for Sustainability Studies, Srinakharinwirot University, Thailand
Clough, Emily	Newcastle University, United Kingdom
Coelho, Nelson	Aalborg University, Denmark
Coenen, Johanna	Leuphana University Lüneburg, Germany
Collste, David	Stockholm Resilience Centre, Stockholm University, Sweden
Contreras, Carolina	University of Melbourne, Australia
Cooper, Joshua	Hawai'i Institute for Human Rights, United States of America
Cosmopolis, Caterina	University of Sheffield, United Kingdom
Cossu, Mara	Ministry of Environment, Italy
Covey, Audrey	Utrecht University, The Netherlands
Creswell, Chayton	RCE North Texas, United States of America
Croese Sylvia	African Centre for Cities, University of Cape Town, South Africa
Cuesta, Andrea	Monash University, Australia
Cummings, Sarah	Wageningen University, The Netherlands
Dalla Vecchia, Veridiana	Universidade Federal do Rio Grande do Sul, Brazil
Dangles, Olivier	IRD, France
Dankel, Dorothy	University of Bergen, Norway
Darras, Marc	4D, France
Darusmam, Darusman	Universitas Syiah Kuala, Indonesia
de Casamajor, Isabelle	Independent researcher, Australia
De Donà, Matteo	University of Gothenburg, Sweden
de Jong, Eileen	Utrecht University, The Netherlands

de Laat, Joost	Utrecht University School of Economics, The Netherlands
De Luca, Sandro	CISP, Italy
de Miranda, Grilli Natali	Oceanographic Institute of University of São Paulo, Brazil
de Zilva, Droovi	Utrecht University, The Netherlands
Dechaumphai, Soracha	Mahidol University, Thailand
Dekker, Gerben	Rijkswaterstaat, Ministry of Infrastructure and Water Management, The Netherlands
del Barrio, Alvarez Daniel	University of Tokyo, Japan
Delabre, Izabela	University of Sussex, United Kingdom
Delgado, Herrera Esperanza	Fundación Mexicana para la Planeación Familiar, A. C. MEXFAM, Mexico
Demydenko, Andriy	IMMSP NASU, Ukraine
Denich, Laura	Humboldt University of Berlin, Germany
Denich, Manfred	Center for Development Research, University of Bonn, Germany
Deporta, Tanya	Terra Institute, Italy
Devignol, Lisa	OREE, France
Dhananjayan, Pugazenthi	Ashden India Collective, India
Di Lucia, Lorenzo	Chalmers University, Sweden
Diaz, Liliana	Université Laval, EDS Institute, Canada
Didace, Bizumuremyi	Ifatizo Organization, Rwanda
Diepstraten, Fleur	SDG Nederland, The Netherlands
Dingwerth, Klaus	University of St. Gallen, Switzerland
Ditta-apichai, Morakot	Songkhla Rajabhat University, Thailand
Djalante, Riyanti	United Nations University, Japan
Dodds, Felix	Water Institute, United States of America
Dombrowsky, Ines	German Development Institute (DIE), Germany
Doussis, Emmanuella	National and Kapodistrian University of Athens, Greece
Downie, Christian	Australian National University, Australia
Driessen, Peter	Utrecht University, The Netherlands
Dzebo, Adis	Stockholm Environment Institute and Utrecht University Copernicus Institute of Sustainable Development, Sweden
Eberz, Isabelle	Deutsches Institut für Entwicklungspolitik (DIE), Germany
Edum, Chukwuebuka	University of Geneva, Switzerland
Eimermann, Marco	Umea University, Sweden
Ekanem, Minika	Norwegian Mapping Authority, Norway
El Messeidy, Rania	MSA University, Egypt
Enechi, Okechukwu	VU University Amsterdam, Netherlands, and Nigeria
Espa, Ilaria	USI Lugano and WTI, Switzerland
Exposito, Camila	CIPPEC, Argentina

Eziolise, Onyebuchi	Lund University, Sweden
Fambasayi, Rongedzayi	North-West University, South Africa
Fariás, Bouvier Martina	CIPPEC, Argentina
Figuerola, Maria Josefina	Copenhagen Business School, Denmark
Flores, Miriam	AJUVES, México
Fraanje, Daan	Utrecht University, The Netherlands
França, Nadir	Foraus, Switzerland
Freiberg, Jörg	German Agency for International Cooperation, Germany
Freixa, Enric	Global Evolution Works, Spain
Fritsche, Uwe	IINAS, Germany
Fritzsche, Felicitas	University of Potsdam, Germany
Fritzsche, Julia	Utrecht University, The Netherlands
Gajjar, Sumetee	South African Institute for International Affairs, South Africa
Galafassi, Diego	Lund University, Sweden
Galang, Elson Ian Nyl	United Nations University Institute for the Advanced Study of Sustainability, Japan
Galvao, Thiago	Universidade de Brasília, Brazil
Garivait, Hathairatana	Environmental Research and Training Center, Thailand
Garrett, Rachael	ETH Zurich, Switzerland
Geisselmann, Jörn	German Agency for International Cooperation, Germany
Geller, Zita	Ministry of Agriculture, Hungary
Geuijen, Karin	Utrecht University, School of Governance, The Netherlands
Ghosh, Bipashyee	Science Policy Research Unit, University of Sussex, United Kingdom
Gicquel, Louison	Utrecht University, The Netherlands
Gietzelt, Jay	Leiden University College, The Netherlands
Giordano, Claudia	University of Bologna, Italy
Gitsham, Matt	Ashridge at Hult International Business School, United Kingdom
Gladkykh, Ganna	ERASME, Sweden
Glass, Lisa-Maria	Leuphana University Lüneburg, Germany
Godoy, Alex	Universidad del Desarrollo, Chile
Goegele, Hannes	SOAS University of London, United Kingdom
Goldstein, Roxana	FCE – UBA, Buenos Aires National University, Argentina
Gomes, Isabel	CIMA Research Foundation, Italy
Gontijo, Virginia	University of Brasilia, Brazil
Gopalsamy, Poyyamoli	Pondicherry University, India
Goritz, Alexandra	Freie Universität Berlin, Deutschland
Gottenhuber, Sara	Linköping University, Sweden
Green, Fergus	Utrecht University, The Netherlands
Greenhill, Lucy	Scottish Association of Marine Science, United Kingdom

Greenwalt, Julie	GEO for Cities, The Netherlands
Gringinger, Peter	Gaia Education, Austria
Grison, Chloé	Utrecht University, The Netherlands
Grob, Leonie	Utrecht University, The Netherlands
Guian, Illanes Maximilien	Utrecht University, The Netherlands
Haas, Peter	University of Massachusetts Amherst, United States of America
Haegele, Ramona	German Development Institute/ Deutsches Institut für Entwicklungspolitik, Germany
Hajer, Maarten	Urban Futures Studio, The Netherlands
Hamuda, Mahsin	UNDP, Bangladesh
Hanotte, Camille	Freelance, The Netherlands
Harich, Jack	Thwink.org, United States of America
Harrison, Elizabeth	Blue Ocean Connections, Australia
Hasan, Azhan	UTP Malaysia and FFU, Free University Berlin Germany, Malaysia
Hatano, Ayako	University of Tokyo, Japan
Hathie, Ibrahima	IPAR, Senegal
Haufler, Virginia	University of Maryland, United States of America
He, Ze	Utrecht University, China
Hecker, Sandy	Young Global Leadership Foundation, United States of America
Hedberg, Charlotta	Umeå University, Sweden
Heidary, Jasmin	Utrecht University, The Netherlands
Hendricks, Shaista	Leo club gado tjo Suriname, Suriname
Hernández, Gabriela	University of Freiburg, Germany
Hernandez, Orozco Efraim	The Stockholm Environment Institute, Latin America centre, Colombia
Hickmann, Lothar	Independent researcher, Germany
Hickmann, Thomas	Utrecht University, The Netherlands
Hidalgo, Sánchez Verónica	Hochschule Landshut, Germany
Hissa, Leticia	Humboldt Universität zu Berlin, Germany
Hoffman, Joseph	Strategic Partnerships for Higher Education and Reform, United Kingdom
Hogenhuis, Jouk	Utrecht University, The Netherlands
Holzer, Jennifer	Brock University, Canada
Honarmand, Ebrahimi Sanaz	University of Twente, The Netherlands
Hopwood, Christopher	University of Edinburgh, United Kingdom
Horký-Hluchá	Institute of International Relations Prague, Czechia
Hornemann, Fabienne	Utrecht University, The Netherlands
Howard, Joanna	Institute of Development Studies, United Kingdom
Hunsirtrakun, Apaphatch	Thailand Greenhouse Gas Management Organization, Thailand
Hutagalung, Fernandez	Genta Media, Indonesia

Iacobuta, Gabriela	German Development Institute (DIE), Germany
Ibembe, Peter James Bakibinga	Reproductive Health Uganda, Uganda
Ilpala, Aleksis	Finnish Environment Institute, Finland
Inoue, Cristina	University of Brasilia, Brazil
Intraprasert, Dusadee	Srinakharinwirot University, Thailand
Isaritameta, Natnarin	ERM, Thailand
Ismail, Walaa	UANIDS, Egypt
Ivannanto, Ananda Setiyo	A-Wing Group, Indonesia
Jacobi, Jantine	UNAIDS, Belgium
Jacobs, Thomas	University of Melbourne, Australia
Jafarzadeh, Nafiseh	National Council for Science and Environment, United States of America
Janchidfa, Kannika	EARTH, Thailand
Janrungautai, Jeeranee	CPF, Thailand
Jansen, Maurice	Erasmus University Rotterdam, The Netherlands
Järnberg, Linn	Stockholm Environment Institute, Sweden
Jayagupta, Ratchada	University of Bangkok, Thailand
Jindal, Arun	Society for Sustainable Development, India
Jofre, David	Independent researcher, Chile
Jones, Bree	The University of Melbourne, Australia
Jones, Briony	University of Warwick, United Kingdom
Jongyung, Thanee	NRRU, Thailand
Jönsson, Kristina	Lund University, Sweden
Jörgens, Helge	Instituto Universitário de Lisboa (ISCTE-IUL), Portugal
Joshi, Somya	Stockholm Environment Institute, Sweden
Kala-Lobe, Christian	GSS-S S-DIV, Canada
Kalfagianni, Agni	Utrecht University, The Netherlands
Kallenberg, Marijn	Utrecht University, The Netherlands
Kapoor, Smily	Samvardhan Samaj Vikas Sanstha, India
Kareem, Aleena	SHAOOR Trainings and Consultancy, Pakistan
Kareem, Mehwish	SKANS School of Accountancy, Pakistan
Karim, Md Rezaul	University of Kassel, Germany and Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh, Germany
Karlsson-Vinkhuyzen, Sylvia	Wageningen University, The Netherlands
Katramiz, Tarek	United Nations University Institute for the Advanced Study of Sustainability, Japan
Kaur, Dilpreet	GoalWeaver Consulting, Singapore
Keesman, Susanne	Utrecht University, The Netherlands
Kefeli, Daniel	University of Münster, Germany
Keklikian, Arto	NCC, Canada

Kellner, Elke	Swiss Federal Institute for Forest, Snow and Landscape Research WSL, Switzerland
Kerklingh, Alissa	Universiteit Utrecht, The Netherlands
Kewara, Punwalai	Burapha University, Thailand
Khan, Fredous	SWF, Bangladesh
Khanum, Nur Syahirah	Malaysian Youth Delegation, Malaysia
Khavhagali, Vhalinavho	University of Twente, South Africa
Khenchi, Alka	Organisation for the Prohibition of Chemical Weapons, The Netherlands
Kim, Rakhyun E.	Utrecht University, The Netherlands
Kimbowa, George	Wageningen University and Research, The Netherlands
Kitchen, Joanna	Centre for the Understanding of Sustainable Prosperity, United Kingdom
Kitpakornsanti, Kittivan	Department of Environmental Quality Promotion, Thailand
Klapwijk, Noa	Utrecht University, The Netherlands
Kleihauer, Silke	University of Applied Science, Germany
Kletter, Maartje	University of Warwick, United Kingdom
Kluewer, Rita	Deutsches Institut für Entwicklungspolitik, Germany
Koch, Florian	HTW Berlin, Germany
Köhler, Gabriele	UNRISD, WECF, Germany
Koloffon, Rosas Montserrat	Vrije Universiteit Amsterdam, Amsterdam, The Netherlands
Koomen, Michelle	Amsterdam University of Applied Sciences, The Netherlands
Korber, Gonçalves Veronica	Federal University of Rio Grande do Sul (UFRGS), Brazil
Korkitrotjana, Boonchuay	DPU, Thailand
Kotzé, Louis	North-West University, South Africa
Kovaleva, Marina	HAW, Germany
Kozak, Alexander	IOM, Germany
Kozar, Raffaella	United Nations University – IAS, Japan
Kramer, Gert Jan	Utrecht University, The Netherlands
Krauss, Judith	University of Sheffield, United Kingdom
Ku, Amir Ku Nurasyiqin	Universiti Utara Malaysia, Malaysia
Kubo, Keiko Kubo	S.E.R.R., United States of America
Kuhn, David	Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands
Kuiken, Reanna	Coastal Carolina University, United States of America
Kumaran, Saravana	NMIMS University, India
Kurth, Marie	Giz, Guatemala
Laksameewanid, Supharat	Freelance, Thailand
Landrigan, Kelly	YGLF, United States of America
Lange, Marcus	Helmholtz-Zentrum Geesthacht, Center for Materials and Coastal Research, Germany

Lankveld, Hanneke	Satya (self employed), The Netherlands
Laonual, Yossapong	KMUTT, Thailand
Larasati, Ajeng	CV Palawa Karya (Private Environmental and Language Consultant Company), Indonesia
Larson, Ronal	Larson Consulting, United States of America
Lauwrier, Marieke	HKU, University of the Arts Utrecht, The Netherlands
Layyinah, Aqilatul	The PRAKARSA, Indonesia
Lazorenko, Olena	Institute of Philosophy, National Academy of Sciences of Ukraine, Ukraine
Le Tissier, Martin	MaREI, UCC, Ireland
Leavesley, Amelia	University of Melbourne, Australia
Lee, Natcha	Chiang Mai University, Thailand
Lehtonen, Markku	Universitat Pompeu Fabra, Spain
Leininger, Julia	German Development Institute, Germany
Leitold, Roxana	University of Cologne, Germany
Leiva Roesch, Jimena	International Peace Institute, United States of America
Lertpradit, Jinnawat	Srinakharinwirot University, Thailand
Lewando, Barbara	Victoria University of Wellington, New Zealand
Li, Yingjie	Michigan State University, United States of America
Limlahapun, Ponthip	Kasetsart University, Thailand
Lin, Tze-Luen	National Taiwan University, Taiwan
Linacre, Simon	Cabells, United Kingdom
Lisowski, Sergej	Volkswagen, Germany
Lobos, Alva Ivonne	Stockholm Environment Institute, Colombia
Long, Graham	Newcastle University, United Kingdom
Lopez, Gaviño Juan Carlos	Universidad Iberoamericana, Mexico
Luanguthai, Pitchakorn	Columbia University, Thailand
Lucyk, Maurer Rafael	Universidade Federal do Pampa, Brazil
Lynes, Laura	The Resilience Institute, Canada
Maaß, Jennifer	Ostfalia University of Applied Sciences, Faculty of Law, Brunswick European Law School, Germany
Maassen, Anne	World Resources Institute, United States of America
Madden, Ketwadee	Songkhla Rajabhat University, Thailand
Maechler, Sylvain	University of Lausanne, Switzerland
Maghfiroh, Akmilatul	PSIT UGM, Indonesia
Magri de Queiroz, Igor	Universidade de Brasília, Brazil
Mahadi, Alizan	Keio University and the Institute of Strategic and International Studies, Malaysia
Mahat, Tek Jung	Nepal Institute for Policy Research (NIPoRe), Nepal
Makrakis, Charidimos	UoA, Greece

Malan, Suzi	University of Pretoria, South Africa
Malem, Fairda	Department of Environmental Quality Promotion/ Ministry of Natural Resources and Environment, Thailand
Maliha, Muzammil	Environmental Change Institute, United Kingdom
Maltais, Aaron	Stockholm Environment Institute, Sweden
Manderbach, Jacob	Justus Liebig University Gießen, Germany
Manou, Dimitra	Aristotle University of Thessaloniki, Greece
Mantilla, Gilma	Pontificia Universidad Javeriana, Colombia
Märker, Carolin	Research Center Jülich, Germany
Martin, Pamela	Coastal Carolina University, United States of America
Martin, Stephen	University of Worcester and University of the West of England, United Kingdom
Martinelli, Fernanda	University of Bonn, Germany
Maskulrath, Parkin	Kasetsart University, Thailand
Masuda, Hiromi	United Nations University-Institute for Advanced Study of Sustainability, Japan
Mathis, Okka Lou	Deutsches Institut für Entwicklungspolitik / German Development Institute (DIE), Germany
Mauerhofer, Volker	Mid Sweden University, Sweden
Maulida, Safina	Migrant CARE, Indonesia
Mbock Kekek, Augustin Yves	Cadire Cameroon Association, Cameroon
McCormick, Kes	Lund University, Sweden
McGovern, Kieren	UNDP, Thailand
Medina, Erwin	Red Agenda 2030 MX, México
Meesomboon, Alisa	SCPHC, Thailand
Mei, Estuning Tyas Wulan	Faculty of Geography, Universitas Gadjah Mada, Indonesia
Melville-Rea, Hannah	New York University Abu Dhabi, United Arab Emirates
Menguzzo, Eloisa	Utrecht University, The Netherlands
Mert, Ayşem	Stockholm University, Sweden
Mguni, Patience	University of Copenhagen, Denmark
Michail, Antonis	World Ports Sustainability Program (WPSP), Greece
Middleton, Alexandra	Oulu Business School, Finland
Minestrini, Stefania	European Environment Agency, Denmark
Miranda, Luis Francisco	University of Barcelona, Spain
Mishra, Oleti Gayatri Mishra	
Mohle, Elisabeth	Universidad de San Martín, Argentina
Möller, Ina	Wageningen University and Research, The Netherlands
Montanari, Luca	Ses Group and Associates, United States of America
Montanari, Madeleine Cléa	Wageningen University, The Netherlands
Montesano, Francesco S.	Utrecht University, The Netherlands

Morita, Kanako	Forestry and Forest Products Research Institute, Japan
Moure, Mar	United Nations University – Institute for Environment and Human Security, Germany
Muangyim, Kamolnat	Sirindhorn College of Public Health Chonburi, Thailand
Muanpawong, Suntariya	Court of Justice, Thailand
Muellneritsch, Michael	Aracuba, Austria
Müller, Miriam Mona	Heinrich Heine University Düsseldorf, Germany
Mungcharoen, Thumrongrut	Kasetsart University, Thailand
Murg, Shannon	National Institute for Environment and Development in Suriname, Suriname
Murun, Temuulen	IGES, Japan
Muskal, Zvi	United Nations Library, United States of America
Mutafoglu, Konar	IASS Potsdam, Germany
Mwangi, Peter	Cafoscari University, Italy
Nagy, Boglárka	Szent Istváán University, Hungary
Nakamura, Julia	University of Strathclyde, United Kingdom
Naufal, Fathin Ahmad	IPB University, Indonesia
Ndegwa, Jackson	KANCO, Kenya
Newton, Peter	Swinburne, Australia
Nguyen, Cuong	Cuu Long Delta Rice Research Institute, Vietnam
Niamsup, Piyapong	Chiang Mai University, Thailand
Niechoj, Diana	Independent researcher, Germany
Niestroy, Ingeborg	IASS, Germany
Niles, Navam	Centre for Poverty Analysis, Sri Lanka
Nilsson, Måns	Stockholm Environment Institute, Sweden
Nimitpornsuko, Nittaya	Mitr Phol Group, Thailand
Nimle, Blamo	College of Management and Administration, William V.S. Tubman University
Ningrum, Dianty	Monash Sustainable Development Institute, Australia
Nuga, Mari	Umeå University, Sweden
Nugraha, Erwin	University of Twente, The Netherlands
Nunes, Nuno	Iscte, Portugal
Nunes, Ana Raquel	University of Warwick, United Kingdom
Obando, Rodriguez Claudia	University of Sussex, United Kingdom
Oertel, Marinus	Utrecht University, The Netherlands
Ojoo-Massawa, Emily	Global Climate Adaptation Partnership, Kenya
Oke, Cathy	Connected Cities Lab, University of Melbourne, Australia
Okitasari, Mahesti	UNU-IAS, Japan
Olajoku, Folawiyo	FKO Investments and Research, Nigeria
Olave-García, Juliana	Independent, Colombia

Oleti, Gayatri Mishra	Larsen and Toubro Public Charitable Trust, India
Omukuti, Jessica	Univesity of York, United Kingdom
Oncha-um, Winitta	Doikham food company, Thailand
Oo, Cheng Keat	Open University Malaysia, Malaysia
Oparaocha, Sheila	ENERGIA International Network on Gender and Sustainable Energy, The Netherlands
Opatz, Charlotte	TUTAKA, Germany
Orimoloye, Israel Ropo	University of the Free State, South Africa
Orlovic, Lovren Violeta	Faculty of Philosophy, University of Belgrade, Serbia
Orsini, Amandine	Université Saint-Louis – Bruxelles, Belgium
Ossewaarde, Martin	Freelance Case Writer, The Netherlands
Ouppaphan, Kwansakul	Mwit, Thailand
Pacheco, Natalia	Independent consultant, The Netherlands
Pacheco-Lopez, Penelope	University of Kent, United Kingdom
Pai, Shruti	College of Social Work Nirmala Niketan, India
Paiyarat, Orathai	Songkhla Rajabhat university, Thailand
Pandit, Ram	University of Western Australia, Australia
Pareek, Mridul	SINReM, Belgium
Park, Eunjeong	London School of Economics and Political Science, United Kingdom
Pärli, Rea	ETH Zurich and Eawag, Switzerland
Parry, Neil	Victoria University, Australia
Parsons, George	Utrecht University, The Netherlands
Parvaputsakul, Phattraravee	State Audit Office, Thailand
Pastor, Alicia	University of Louvain, Belgium
Pataraiia, Lela	Treasury Service of the Ministry of Finance, Georgia
Patoonsittichai, Prasertsuk	Board of Directors of Thailand GHG Management, Thailand
Paulavets, Katsia	International Science Council, France
Persson, Åsa	Stockholm Environment Institute, Sweden
Pfeffer, Janosch	Utrecht University, The Netherlands
Pfund, Stella	Utrecht University, The Netherlands
Pham-Truffert, Myriam	Centre for Development and Environment (CDE), University of Bern, Switzerland
Phanthuwongpakdee, Nuttavikhom	SDG Move, Thailand
Phanumat, Wanvipa	DASTA, Thailand
Phonprapai, Chanan	Thammasat University, Thailand
Phuphaphantakarn, Phantitra	Thammasat University, Thailand
Pichaikul, Ruengrawee	Gender and Development Research Institute, Thailand
Pickering, Jonathan	University of Canberra, Australia

Pigatto, Marivanda Bortoloso	Universidade Positivo, Brazil
Pilon, André Francisco	University of São Paulo / International Academy of Science, Health and Ecology, Brazil
Platt-Behrens, Kira	Well-Natured Wandering, Australia
Plieninger, Tobias	University of Göttingen, Germany
Porter, Stephen	Independent, United Kingdom
Prabowo, Mochammad Hendro	German Agency for International Cooperation, Indonesia
Pradhan, Geeta	VSO, Nepal
Pradhan, Prajal	Potsdam Institute for Climate Impact Research, Germany
Pramanagara, Rio Octovinary	University of Papua, Indonesia
Pramulya, Rahmat	Universitas Teuku Umar, Indonesia
Prathumchai, Kulapramote	Kasetsart University, Thailand
Presicce, Laura	Rovira i Virgili University, Spain
Proctor, Joanne	Utrecht University, The Netherlands
Proikaki, Marina	University of the Aegean, Greece
Prutipinyo, Chardsumon	Faculty of Public Health, Mahidol University, Thailand
Puntujariya, Prapasri	Bangchak Corporation Plc., Thailand
Purwandono, Ahmad Fauzi	Utrecht University, the Netherland
Putkham, Apipong	Maharakham University, Thailand
Quirk, Genevieve	Australian National Centre for Ocean Resources and Security, Australia
Rahman, Mohammed Aatur	International University of Business Agriculture and Technology, Bangladesh
Rahmaty, Masooma	International Peace Institute, United States of America
Rai, Akanksha	NA, India
Raisbeck, Peter	University of Melbourne, Australia
Rakpathum, Suthasinee	ERM, Thailand
Ramanathan, Ramya	UNOSSC, Canada
Ramasar, Vasna	Lund University, Sweden
Rambausek, Lina	Low and Bonar, The Netherlands
Ramirez, Matias	University of Sussex, United Kingdom
Ramírez, David Beatriz	Consultora, Investigadora y Escritora, Colombia
Ramos, Daniel	University of Minho, Portugal
Rana, Zunera	Radboud University, The Netherlands
Rantala, Salla	Finnish Environment Institute, Finland
Rao, Raja Mohan	University of Hyderabad, India
Rattana, Sunirat	The Regional Environmental Office 7, Thailand
Raven, Rob	Monash Sustainable Development Institute, Australia
Raza, Syed Farrukh	HPS, Pakistan
Razo-Zapata, Ivan	COCOA Collaborative Innovation, The Netherlands

Reimer, Don	D.R. Systems Inc., Canada
Reis, Tiago	ELIC/ UCLouvain, Belgium
Renza, Victor	BI, Norway
Riaño, Maria Alejandra	IDDR, France
Ribeiro, Patrícia	CMTV, Portugal
Ribeiro, Alexandra	NOVA University of Lisbon, Portugal
Rietig, Katharine	Newcastle University, United Kingdom
Roberts, Sarah	The Resilience Insitutute, Canada
Rocha, Loures Flavia	Milaré Advogados, Brazil
Rochell, Katharina	Utrecht University, The Netherlands
Rojas, Ariel	Transdiaspora Network, United States of America
Roland, Holst Rozemarijn	Utrecht University, The Netherlands
Romero, Oscar	Utrecht University Centre for Global Challengers, The Netherlands
Rosales, Carreon Jesus	Utrecht University, The Netherlands
Rosen, Leah	Wageningen University, The Netherlands
Rothwell, Natalie	Warwick University, United Kingdom
Rowhani, Pedram	University of Sussex, United Kingdom
Ruangchotevit, Rath	ERTC, Thailand
Ruf, Simon	Germany
Runhaar, Hens	Utrecht University and Wageningen University, The Netherlands
Sadoun, Britta	K+S Aktiengesellschaft, Germany
Sahoo, Sarbeswara	Tribal Research and Institute, Gujarat, India
Salo, Hanna	Finnish Environment Institute, Finland
San Martim Portes, Alexandre	Australian National University, Australia
Sanderink, Lisa	Vrije Universiteit Amsterdam, The Netherlands
Sandholz, Simone	United Nations University – Institute for Environment and Human Security, Germany
Santhitwanich, Arunee	Ubon Ratchathani University, Thailand
Saraphol, Preechaya	University of Queensland, Australia
Sareen, Siddharth	University of Bergen, Norway
Sarkar, Md. Sujahangir Kabir	United Nations University, Japan
Satria, Randi	RIFF, Indonesia
Schleifer, Philip	University of Amsterdam, The Netherlands
Schmitt, Tugce	European Observatory on Health Systems and Policies, Belgium
Scholz, Imme	German Development Institute, Germany
Schönwälder, Gerd	European Commission, Belgium
Schot, Johan	Utrecht University, The Netherlands
Schwachula, Anna	German Development Institute, Germany

Schwindenhammer, Sandra	Justus-Liebig-University Gießen, Germany
Scobie, Michelle	University of the West Indies, Trinidad and Tobago
Scown, Murray	Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands
Seangkiatiyuth, Kanyanee	Central Laboratory (Thailand) Co.,Ltd., Thailand
Seehanam, Pimjai	Faculty of Agriculture, Chiang Mai University, Thailand
Sénit, Carole-Anne	Utrecht University, The Netherlands
Sharma, Shruti	International Institute for Sustainable Development, India
Shaw, Victoria	Transformative Innovation Policy Consortium, United Kingdom
Shaw, Jackie	Institute of Development Studies, United Kingdom
Shawoo, Zoha	Stockholm Environment Institute, Sweden
Shrestha, Gyami Shrestha	US Carbon Cycle Science Program and UCAR, United States of America
Shrestha, Anil	University of British Columbia, Nepal
Siebenhüner, Bernd	Carl von Ossietzky University of Oldenburg, Germany
Siegel, Karen	University of Münster, Germany
Silitonga, Richard	PT MRT Jakarta, Indonesia
Silphiphat, Kevalin	Kasetsart University, Thailand
Simangan, Dahlia	Hiroshima University, Japan
Šime, Zane	Association of Polar Early Career Scientists, Latvia
Sirichotiratana, Nithat	Mahidol University, Thailand
Sirilertsuan, Petchprakai	University of Boras, University of Lille and ENSAIT, Soochow University, France
Siriwat, Patcharapan	Mahidol University, Thailand
Skovgaard, Jakob	Lund University, Sweden
Smith, Virgil	Primoris Solutions Group, Canada
Soergel, Bjoern	Potsdam Institute for Climate Impact Research, Germany
Soilihi, Abdou	CNARPP, France
Soliman, Atef	Gatef Organization, Egypt
Sondermann, Elena	University of Duisburg-Essen (INEF), Germany
Sow, Ibrahima Sory	Les Jeunes Ambassadeurs de l'Environnement pour le Développement durable, Guinea
Spijkers, Otto	China Institute of Boundary and Ocean Studies (CIBOS) of Wuhan University, China
Spijkers, Suzanne	Utrecht University, The Netherlands
Spinazzola, Matteo	Utrecht University, The Netherlands
Stamm, Julia	The Futures Project, Germany
Stépantoro, Benedictus Dwiagus	InDEC, Indonesia
Stevance, Anne-Sophie	International Science Council, France
Stewart, Benjamin	German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), Germany
Stiepani, Johann	Uppsala, Sweden

Strange, Tracey	Galaxea Advisory, France
Straus, Fruzsina	UN-Habitat, Kenya
Subandi, Fadelia Deby	SDGs Hub Universitas Indonesia and UN SDSN Indonesia, Indonesia
Subunruk, Topazs	Thai AirAsia Co Ltd, Thailand
Sukaew, Thitiporn	International Health Policy Program, Thailand
Suleri, Abid	Sustainable Development Policy Institute, Pakistan
Sun, Yixian	University of Bath, United Kingdom
Suntharanurak, Sutthi	State Audit Office of the Kingdom of Thailand, Thailand
Suratha, Kasina	Burapha University, Thailand
Susanti, Ari	Universitas Gadjah Mada, Indonesia
Susur, Ebru	Utrecht University, Spain
Suthiluck, Kridchai	Nawarat Patanakarn Public Company Limited, Thailand
Svenson, Frithiof	Carl von Ossietzky University Oldenburg, Germany
Syahwali, Siti	CEVA, Indonesia
Syed, Mohamed Abubacker Siddick	HAND IN HAND INDIA, India
Takahashi, Yasuo	Institute for Global Environmental Strategies, Japan
Takkanon, Pattaranan	Kasetsart University, Thailand
Tanipu, Funco	State University of Gorontalo, Indonesia
Tanipu, Zulkifli	Gorontalo State University, Indonesia
Tanzer, Magdalena	Justus Liebig University Gießen, Germany
Tap, Timotheus	Tilburg University, The Netherlands
Taranger, Karianne K.	Utrecht University, The Netherlands
Tatwany, Hany	Saudi Wildlife Authority, Saudi Arabia
Taveekan, Thunradee	Prince of Songkla University, Thailand
ten Veen, Rianne	Green Creation, The Netherlands
Ternsjö, Linn	Lund University, Sweden
Thaiphanit, Somruedee	Siam University, Thailand
Thanasrivanitchai, Sirin	Thaiwat Engineering Co., Ltd., Thailand
Thane, Katharine	Ms, United Kingdom
Thapa, Pratibha	Potsdam Institute of Climate Impact Research, Germany
Theampetch, Apichaya	SSI, Thailand
Theeuwes, Nikki	Utrecht University, The Netherlands
Theodorou, Nikolaos Alexandros	Freelance, The Netherlands
Thibon, Maxime	IRD, France
Thompson, John	University of Sussex, United Kingdom
Thongjumrool, Phoossarapha	University of Duisburg-Essen, Germany
Thongprasit, Panupong	Charm Tech Consultant, Thailand

Thongpuak, Chuleegorn	Centara Hotels and Resorts, Thailand
Thungren, Gustav	Earth System Governance Project, The Netherlands
Thwaites, John	Monash University, Australia
Tibkaew, Anisara	Kasetsart University, Thailand
Tirtoadisurja, Fransiska	UN ECOSOC, Australia
Tongsopit, Sopida	Office of National Higher Education Science Research and Innovation Policy Council, Thailand
Tops, James	Wageningen University and Research, Belgium
Tossas, Adrianne	University of Puerto Rico, Aguadilla, Puerto Rico
Tran, Chau	Utrecht University, The Netherlands
Traore, Cheick Alassanne	University of Ottawa, CANADA
Tremblay, David	Université du Québec à Chicoutimi, Canada
Treyer, Sébastien	Institute for Sustainable Development and International Relations, France
Tribukait, Julika	WWF Germany, Germany
Triyanti, Annisa	Utrecht University, The Netherlands
Trundle, Alexei	The University of Melbourne, Australia
Tudpor, Kukiatt	Maharakham University, Thailand
Ulbrich, Philipp	University of Warwick, United Kingdom
Ulrick, Jennifer	Education International, Belgium
Uy, Noralene	Ateneo de Manila University, Philippines
van Asselt, Harro	University of Eastern Finland, The Netherlands
van Dam, Jinke	Rep. Tropenbos International, The Netherlands
van den Broek, Karlijn	Copernicus Institute for Sustainable Development, The Netherlands
van der Hel, Sandra	Utrecht University, The Netherlands
van der Kooij, Susanne	Ecorys, The Netherlands
van Driel, Melanie	Utrecht University, the Netherlands
van Gerven, Inga	BMC, The Netherlands
van Hal, Jos	UAS van Hall-Larenstein, The Netherlands
van Leeuwen, Kees	KWR Water Research Institute and Utrecht University, The Netherlands
van Soest, Heleen	PBL Netherlands Environmental Assessment Agency, The Netherlands
Varumo, Liisa	SYKE, Finland
Veit, Wolfgang	Technische Hochschule Köln, Germany
Vejpongsa, Issariya	Kasetsart University, Thailand
Vergragt, Philip	SCORAI, United States of America
Vichit, Niramol	Bangkok, Thailand
Victor-Uadiale, Ifeyinwa	Queen Margaret University, United Kingdom
Viera, Romero Michelle	SUNY ESF, Ecuador

Vijge, Marjanneke	Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands
Vikström, Suvi	Finnish Environment Institute SYKE, Finland
Virapat, Cherdasak	Centre on Integrated Rural Development for Asia-Pacific, Thailand
Visseren-Hamakers, Ingrid	Radboud University, The Netherlands
Vogelzang, Fenna	Utrecht University, The Netherlands
Völker, Thomas	University of Bergen, Austria
Wagner, Lynn	IISD, United States of America
Walker, Clare	The University of Melbourne, Australia
Walther, Claudia	German Agency for International Cooperation, Germany
Wang, Xin	GGTC, China
Wannalak, Vorawan	University of Potsdam, Germany
Wannapahool, Dacha	Sirindhorn College of Publichealth Chonburi, Thailand
Wantim, Mabel Nechia	University of Buea, Cameroon
Warchold, Anne	Potsdam Institute for Climate Impact Research, Germany
Warner, Rosalind	Okanagan College, Canada
Washaya, Washaya	Euclid University, Zimbabwe
Watson, Sarah	Mitigado and Melbourne Law School, University of Melbourne, Australia
Webb, Bob	Australian National University, Australia
Wechpibal, Naruthep	Post Harvest Technology Division, Thailand
Weikmans, Romain	Université Libre de Bruxelles / Free University of Brussels, Belgium
Weiland, Sabine	ESPOL, Université Catholique de Lille, France
Weiss, Sebastian	Wageningen University, The Netherlands
WeiB, Alina	Utrecht University, The Netherlands
Wells, Brown Tanya	London School of Hygiene and Tropical Medicine, United Kingdom
Werner, Frank	World Environment Center Europe e.V., Germany
Westermann-Behaylo, Michelle	University of Amsterdam, The Netherlands
Whitley, Brandon	Utrecht University, The Netherlands
Whyte Hester	University College Cork, Ireland
Wichittrakarn, Pavin	Kasetsart University, Thailand
Wicke, Birka	Utrecht University, The Netherlands
Wickramaratne, Pubudini	Oxfam, Sri Lanka
Widerberg, Oscar	IVM, Vrije Universiteit Amsterdam, The Netherlands
Williams, Vicki	Utrecht University, The Netherlands
Wisaweisuan, Nitinant	Thammasat University, Thailand
Wolok, Eduart	State University of Gorontalo, Indonesia
Wong, Ryan	University of Munich, Germany
Xie, Linjun	Durham University, United Kingdom

Yadav, Kartika	National Planning Commission, Nepal
Yafa, Orawan	ASEAN Centre for Sustainable Development Studies and Dialogue (ACSDSD), Thailand
Yamane, Tomomi	Hiroshima University, Japan
Yamineva, Yulia	University of Eastern Finland, Finland
Yang, Yizhao	University of Oregon, United States of America
Yang, Tianrun	Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands
Yanuardi, Yanuardi	Utrecht University, The Netherlands
Yap, Russell	Singapore Management University, Singapore
Ylipää, Josephine	Lund University Centre for Sustainability Studies, Sweden
Yog, Anupam	National University of Singapore, Singapore
Yoon, Semeo	Yonsei University, South Korea
Yoosamran, Thundanai	International Institute for Trade and Development, Thailand
Yunita, Abbie	Utrecht University, The Netherlands
Zamora-López, Sheila	Hamburg University, Germany
Zelli, Fariborz	Lund University, Sweden
Zerdoum, Saliha	Expert, Algeria
Zervudachi, Natasha	Fung Group, United Kingdom
Zhao, Bi	Purdue University, United States of America
Zindel, Charles	UN Youth Corps (Coastal Carolina University), United States of America
Zubcevic, Irena	United Nations, United States of America