

# BEYOND SDG INDICATORS PART 1: EXPLORING THE ROLE OF INTEGRATED ASSESSMENT IN IMPLEMENTING THE SUSTAINABLE DEVELOPMENT GOALS

### REPORT OF TIAS-IISD WEBINAR

**FEBRUARY 2, 2016** 

#### Organized and hosted by:

THE INTEGRATED ASSESSMENT SOCIETY (TIAS)
AND
INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT (IISD)

#### Chaired by:

**László Pintér**, Central European University (CEU) and International Institute for Sustainable Development (IISD)



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Organizing committee: László Pintér, Jan Bakkes, Caroline van Bers, Joanne Vinke-de Kruijf

#### **Acknowledgements:**

TIAS and IISD extend a special word of thanks to our presenters, Marc Levy, David O'Connor and Enrico Giovanni, for sharing with us their expertise and insights and to all of the participants of the webinar for sharing your time, your questions and insights. We look forward to collaborating with you in the future.

# TIAS-IISD Webinar Report: BEYOND SDG INDICATORS PART 1: EXPLORING THE ROLE OF INTEGRATED ASSESSMENT IN IMPLEMENTING THE SUSTAINABLE DEVELOPMENT GOALS (02 Feb. 2016)

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#### 1. Introduction to TIAS and the webinar

The Integrated Assessment Society (TIAS) is a not-for-profit entity created to support the community of scientists, practitioners, and stakeholders who develop and use Integrated Assessment (IA). The goals of TIAS are to nurture this community, to promote the development of IA and to encourage its wise application. Within this context, TIAS initiates and actively supports a variety of activities that allow the IA community to meet each other, learn about past and on-going experiences with IA, and develop new activities.

TIAS defines IA as the interdisciplinary process of integrating knowledge from scientists, practitioners and stakeholder groups in order to evaluate a problem situation from different perspectives and provide support for its solutions. IA is used by scientists, policy analysts and practitioners to identify and integrate knowledge about a problem domain as well as to inform and support decision-making and policy processes. IA therefore supports a range of fields concerned with sustainable development, including the implementation of the Sustainable development goals (SDGs). The SDGs have been approved by the UN General Assembly as key elements of the post-2015 development agenda in September 2015. The goals represent a significant challenge for the science and policy community, given their broad scope, diversity, inherent uncertainties, the vested interests involved, and growing urgency for action.

As a crucial element of their implementation, there is significant interest in defining SDG indicators, given their potential role in monitoring and progress review. However, beyond having suitable statistical instruments for measuring progress, moving SDGs into the mainstream of policy and practice will also require analytic tools and methods that can address SDGs as a system, analyse their relationships, and allow policymakers, experts and the public to identify and test hypotheses about implementation options in the context of scenarios. The hypothesis underlying this webinar is that the conceptual approach, tools and methods of IA make it an interesting candidate to play a role.

The three presenters bring both an inside perspective of the SDG process and decades of experience in navigating the science – policy interface related to the imperatives of human well-being and sustainable development. They addressed where the need for assessment and strategic analysis in the different stages of SDG implementation may arise, how it can build on the work on indicators and statistics, and the related institutional and capacity issues.

A **second part of this webinar on April, 12 2016** will focus on leading efforts to support SDG implementation assessment and strategic planning through integrated modelling.

#### 2. Welcome and introductory remarks

**László Pintér** (chair), Professor, Central European University and Senior Fellow & Associate, International Institute for Sustainable Development

Highlights from László Pintér's introduction:

- The SDGs represent significant innovation in international policy regimes related to sustainable development due, among others, to their universal applicability, broad scope and the inclusiveness of the process in which they were developed.
- They also brought a significant renaissance of interest in indicators, as key components of the SDGs implementation mechanisms, from planning to implementation to monitoring and review
- The newfound high-level interest builds on a decades-long tradition of interest in sustainable development indicators, mainstream statistical systems and increasingly mainstream data from Earth observation and remote sensing systems.
- There is significant interest in the SDG indicators that will be released by the UN Statistical Division in March 2016.
- However, while indicators will indeed be central to goal selection, implementation, reporting and accountability schemes, in order to make an impact indicators need to be integrated into the instruments and mechanisms of decision-making.
- This is where we hypothesize assessment, and in particular Integrated Assessment can help, as it has the concepts and tools that fit the scope and ambition of the SDG agenda.
- Integration e.g., in the spatial, temporal or cross-thematic sense calls for looking at the SDGs and indicators not in their isolation but as a closely coupled and interlinked whole, with both quantitative and qualitative dimensions
- The three distinguished speakers today are all veterans of the field, they have been insiders of the SDG process, and they will cover three aspects: the conceptual and institutional dimension of integrated assessment as it relates to SDGs, a perspective on the SDGs as a system of goals, and how can our statistical agencies feed and interface with the policy mechanisms and progress tracking.

#### 3. From planning to monitoring and review: An institutional perspective

*Marc Levy*, Deputy Director, Center for International Earth Science Information Network (CIESIN), Earth Institute, Columbia University

#### **Highlights from Marc Levy's presentation:**

- One can draw analogies between the SDG process and other goal-oriented missions, such as, the mission to the moon and exploring unchartered territory of the US.
- The SDG process encompasses a wide range of human aspirations, but we do not know how to measure progress, agree on how important they are or what to do about them. The process involves making a map as we go and is more similar to the US territory process. In contrast, the implementation of the Millennium Development Goals was more in common with the mission to the moon (consensus on importance, ability to measure and knowledge of what to do).
- In the SDG process, data plays a multi-dimensional role. In this sense there are lots of similarities to IA.
- Implications for data processes to institutions are profound. No government has figured out how to use diverse data sources in development planning. There is a need for institutional and technical experts to work together on solutions.
- No country or institution can measure all relevant data. Draws attention to the data community, enabling conditions, trust and communication etc.

- Institutions recognize that they need to change as we are moving from data as product towards data as services with more diverse data providers. This requires bridge-building institutions that can provide data and interpretation of data as a service in many forms and on many platforms.
- Three grand challenges, to which participants could contribute, are highlighted (see the textbox below) to which. Participants can become involved and contribute to solutions viathe Global Partnership for Sustainable Development Data, Sustainable Development Solutions Networks or the World Economic Forum, among others.

## Key implications and challenges for IA (as highlighted by Marc during his presentation and in the discussion)

The role of data and related implications:

- Data operate in networked settings. The data community rather than the data set is the object.
- More attention needed for enabling condition; trust and communication are as important as accuracy and authority.
- Planning, monitoring and evaluation are intertwined IA is a key tool.
- Traditional institutional arrangements are adapting, new institutions and partnerships emerging institutional change needs more attention.

Meeting institutional demands and building institutional support – grand challenges:

- 1. Pooling commercial and other data while safeguarding privacy, competiveness and quality.
- 2. Making IAs as transparent and portable as data and indicators.
- 3. Implement methods to estimate the value of data and indicators in the context of integrated SDG planning and implementation (making intelligent choices).

Improved bottom-up risk management approaches are promising. It would make a difference if we could better manage key risks and assign more rights and provide better information about risks to individuals.

#### Questions addressed during the webinar:

László Pintér (chair): Interesting overview of changes in the institutional landscape of how we apply and make data available. You started with the unchartered map, which indicates that we need to think about institutional capacities and how to make use of this expanding universe. What is in the unchartered part of the map? What does it mean for statistical agencies and other institutions? In case of unchartered landscapes, it helps to acknowledge that what is happening and should happen are contested concepts. Oftentimes, the comprehensiveness of SDGs is celebrated but that very breadth is going to lead to disagreement about what we see and what we want to happen. Data that facilitates a productive, constructive debate requires attention for maximum relevance and contested concepts. Ability to integrate data across domains is highly important when mapping unchartered territories, which requires different institutional investments. Also like to draw attention to the issue of scale: much attention at the measurement side. Currently also a new community arising that looks at meaning of scales and context.

Gabriel Moncea: How can you make sure that the data provided by some countries isn't false? You cannot make that completely sure. Need for a set of mechanisms to detect false data and to minimize damage. We have well-developed institutional mechanisms and tools and new ones are being developed.

John Callewaert: Marc, what do you think about the Yale Environmental Performance Index (http://epi.yale.edu/) as a mechanism for assessing the SDGs?

Marc is involved in the development of these performance-oriented measurement tool that is

benchmarking country progress. What we see happening there is that once you expand the conventional agenda into a more comprehensive one you run into all kind of difficulties. We also see combining data from governmental and non-governmental sources.

Sonigitu Ekpe: In Nigeria data reliability is a challenge; how do we validate our data, which is based on an estimation?

This is not just a challenge in Nigeria but around the world. The UN mechanisms and Global Partnership are helpful here. Validating data requires good mechanisms inside the governments and communities of practice outside the government paying attention and coming with independent measures.

Nicholas Watts: Who is taking care of the differential capacity of countries to produce the data, for example SIDS and small LDCs?

This is an area of very active development. Every single actor involved in the data for the SDG process devotes serious effort to this question. This does not mean that we figured out how to do that effectively.

#### **Remaining questions and comments:**

Pier Luigi Buttigieg: We're working with UNEP on an ontology to clarify the meaning behind the terminology in the SDGs. Do the various data solutions use semantic approaches to help integration? We'd be very interested in collaborating.

Elissar Sarrouh: Would it possible to elaborate on institutional support in designing indicators and assessment tools that are different from those we had for the MDGs.

Anita Pirc Velkavrh: What do you think about dealing with forward-looking information and methods in this context?

Gabriel Moncea: I live in Romania, which is a very corrupt country. The UN discovered that the politicians were "unaware" of the degree of poverty it was in the country. They "thought" it was much less. Also, what can we do for the mass-media in order the cover these subjects more and better?

Martin Kowarsch: Marc's analogy on mapping uncharted territory reminds me of the "cartography model of scientific policy advice", see:

http://www.sciencedirect.com/science/article/pii/S1462901115000660

Peter M Haas: Marc's comment about contested concepts was interesting - what are the implications of a learning-by-talking model for who should be involved and how?

#### 4. SDGs as a network of targets

David O'Connor, Former Chief, Policy Analysis and Networks Branch, UN DESA

#### **Highlights from David O'Connor's presentation:**

- In the SDG process, there has been a growing recognition that socio-economic and environmental dimensions are inseparable. Recognizing these interlinkages should make for more effective policies and action.
- Many linkages across different SDGs as well as linkages to three aspects of sustainable development. This was also required. How to deal with these interlinkages in analytical and policy terms?
- Analytical dimension: through IA methods (e.g. forward looking and backcasting models).

However, many models/assessments are not very good at linking environmental and economic dimensions to social dimensions. There are gaps and areas where IA models need more work. Moreover, the goals do not tell much about whether achieving a certain goal in one area is likely to help to achieve related goals; yet we need to find and implement solutions that effectively address more than one problem or goal. IA and scenario modelling could shed light on this.

- Policy dimension: One way would be to first start from a primary goal and to explore how this goal, through the targets, is connected to other related goals. From the different goals, the "sustainable consumption and production" goal has the highest number of interconnections with other goals and is therefore highly cross-cutting. Looking at interactions among goals, targets and indicators is ambitious and data-sensitive. A second step would be to analyse linkages in terms of their causality, strength and relationship. A nexus approach or IA models could be helpful. As looking at all interlinkages is an ambitious undertaking, it may be useful for a particular policy purpose to focus only on the strongest interdependencies. From a nexus perspective, one target may have one of the following kind of interlinkages with other targets: a dependency relation, impose conditions or reinforce the achievement of another target (e.g. food-water-energy nexus).
- Implications for strategic planning: interrelations matter, goals need to be examined from multiple perspectives and a deep understanding of interdependencies is needed.
- Implications for policy makers: should be informed by consistent assessments and scenario models that reflect interdependencies, synergies and trade-offs, joint planning and coordinated actions, coordinate policy development to achieve coherence.

#### **Questions addressed during the webinar:**

László Pintér: You mentioned the need for scenarios and models to assess interlinkages and cobenefits. Where does the capacity to do this reside? Are there capacity gaps? How serious are they? There are multiple active, engaged global modelling communities. There is time for modellers to collaborate and to explore interlinkages. The team preparing the SDG report already works with modellers to further develop more comprehensive, consistent and well-integrated models. OECD has also done considerable work and provides rich sources of knowledge and experience.

Martin Kowarsch: What do you think about the recent attempts by the IPCC WG III to assess also synergies between different SDG-related policy fields?

I do not know the details about this but it sounds like an encouraging endeavour and I look forward to learn about the results. What I have learned is that potential co-benefits of e.g. climate policies has been underappreciated in the past but is now appreciating them more.

Pier Luigi Buttigieg: On interlinkages: we're working with UNEP to represent the meaning behind and semantic interlinkages between the entities referenced in the SDGs, targets, and indicators (https://github.com/SDG-InterfaceOntology/sdgio). The end result would be very similar to the networks you showed (accounting for dependencies), updated dynamically by multiple contributors and able to accommodate multiple interpretations of the terminology. This semantic model can be linked to conceptual and data-driven models. How would we go about synchronizing our efforts with the great work you referenced?

This sounds like very exciting work and I would need to have a further look into this. It would be worthwhile to connect to global modelling society. Thanks for flagging. Note from the chair: integrated modelling will be addressed in the next webinar.

Lars Mortensen: How do you see the need for integration on the one hand and various UN organization taking the lead for different dimensions of the SDGs, e.g. UNEP taking the lead on the environmental dimension on the other hand?

One thing to consider in the light of the integrated agenda and interdependencies: would it be possible to integrate the modelling work of, e.g. across various UN organizations, and the global modelling community? What is needed is a cross-organizational modelling group focused on aligning existing models that would support implementation on the ground.

Sonigitu Ekpe: What happens to countries without policies backed by law?

The lack of adequate enforcement of policy is a widespread problem. Hopefully capacity for enforcement will be strengthened (SDG 16 focuses on this). Developing countries need international support. An important aspect will be improving domestic resource mobilization capacities.

Pervez Hassan: How can policy coherence at the national level be achieved particularly in different country contexts?

An important step would be to identify the most important interconnections, including possible trade-offs and synergies, to improve policy coherence. Also important is the coherence between what is done domestically and internationally: what happens in one country affects has implications for the global level and for other countries.

#### **Remaining questions and comments:**

Gabriel Moncea: Some policy makers don't look at the data, don't care about the facts or are too corrupt to think about these issues. How can we reinforce the necessity of good policies?

David Berry: Are the organizations at international, national, and NGO levels seeking to help on data gathering, analysis, outreach, and facilitation of processes? In other words, to what degree do you see the current culture of the SDG efforts to be open to input?

Bill Cosgrove: UN-Water, which includes all agencies somehow related to water, are looking at how the linkages are made between goals and targets within their domains. Are there other similar groupings of agencies?

Anita Pirc Velkavrh: The complexity of problems and interlinkages probably require some approaches that go beyond modelling, for example, participatory foresight methods. What is your opinion on this?

#### 5. From SDG statistics to addressing the decision support needs of governments

**Enrico Giovannini**, Professor, University of Rome "Tor Vergata", Former Minister of Labour and Social Policy, Italy

#### **Highlights from Enrico Giovannini's presentation:**

- Measurement should go beyond GDP and should focus on what is actually going on in terms of sustainable development (see e.g. UN SG's Synthesis report).
- Progress in the field of measurement was made in the past ten years. Moving beyond GDP basically requires an adequate understanding and integrated view of what well-being means (OECD conceptual framework).
- There are many obstacles to advance the 'beyond GDP' approach, such as, the lack of democratic legitimacy, underpinning theory and narrative, political imperative of alternative indicators and so on.
- Actions needed to overcome these obstacles according to the BRAINPOol report (an EU research network): build support for change, develop analytical tools and improve procedures and structures. Important recommendations were also made in reports that were

published in the UK and by the pope (Laudato Si) who stressed the need for integrated thinking and pointed out the close connection between deterioration in the human/social and the environmental field.

- How to change policy? We need to look at ecosystem and human wellbeing and their interlinkages (OECD framework 2009). This includes moving from the old economic paradigm focused on the GDP towards a new paradigm that takes planetary boundaries and human well-being, different forms of capital, happiness and skills into account.
- SDGs can be linked to different dimensions and elements of a 'full world vision'. This results in a complicated picture and models.
- Availability of timely data can affect the public discourse.
- We face serious challenges. The task of our generation is to transform society. What if a country (the Republic of Wellbeing) would genuinely be committed to pursuing the SDGs? This would require changes in terms of constitutions, governance structures, indicators and the public debate, models for impact evaluation (how they are built, interconnections, costs and benefits) as well as the international debate and negotiation processes.
- In conclusion: SDGs have been a milestone for humanity, data are important but not enough and profound changes are needed in policies and business strategies and requires integrated strategy.

#### Questions addressed during the webinar:

Stephanie: There are so many forms of measuring impact and measuring SDGs globally, nationally and regionally. How can we create greater alignment so we are able to more accurately assess progress we are making to achieve the goals?

This is a very important for regions, like EU, with supranational institutions. We have national agendas that cover SDGs already and are relatively more difficult to change than the agendas of developing countries who already went through the MDG process. In the developed world, most think about sustainable development in terms of the environment and there is a need for building political willingness.

Sonigitu Ekpe: How can we start developing capacities of partners with low knowledge on the complexities that the SGD shall present least and developing countries?

International organizations already think about this. In addition, academia could play an important role in this. For example, my own University now has sustainable development in its vision and mission and will try to engage partners, also from developing countries.

Paola Fajardo: The concepts of sustainability and human well-being have been interpreted and measured in different ways depending on several socio-cultural contexts and interests at local and national scales, which makes challenging their tangible achievement. How can this be assessed and integrated at larger scales?

It has long been argued that very country has to define wellbeing for itself, even though research shows that key dimensions of wellbeing are similar for developed and developing countries. With the introduction of the SDGs, this issue is over since. For the first time in human history, we have a common agenda that creates the kind of alignment you are referring to.

Nadeem: The Republic of Wellbeing is highly likely also embarking on Sendai Framework on DRR and Paris Agreement which makes the measurement more complex. What is the best for the Republic to synergise these three agendas?

This should not be an issue as the agenda of the Republic of Wellbeing is not different from the agendas of the SDGs and other frameworks.

Nicholas Watts: Thank you for addressing the difficulties of bureaucratic politics, or, thinking in

silos. Do you think that the 'Republic of Wellbeing' would be easier to achieve by placing the emphasis on policy at local government level, encouraging more easily measurable integrated approaches to policy? At the national level, it is probably more difficult to change the relative importance and size of different ministries.

Different levels (e.g. local, national and supranational) are needed and a key issue is how to link these levels. A possible action to form an alliance and to push different government levels in the same direction so that there is a common push into the same direction.

One of the questions was on how to change the relative importance of the size of different Ministries. We know that Finance Ministries are the most powerful ones but there are many good examples of countries where sustainable development has been put with the responsibilities of the Prime Minister. This could be a way to achieve policy coherence, both nationally and internationally. Therefore we should push our governments and parliaments to flag the needs and to take leadership.

#### **Remaining questions and comments:**

Anita Pirc Velkavrh: How to make the best use of existing networks to support this work and contribute to the accuracy of information, knowledge and experience sharing? In Europe we have for example well established Eionet network with representatives from all countries in 27 environment related fields-big source I would say and may be globally there are others as well.

Stephanie: What do we need to do create better alignment of measurement between the different actors?

Mark Jensen: I am also working on the SDG ontology project with UNEP. Perhaps a general question for anyone here: Where would one find the conceptual frameworks that nations and organizations are using to calculate their progress towards the targets?" That would help us represent them in our semantic model, and facilitate the alignment and integration of the data.

*Pervez Hassan: How is accountability to citizens ensured in the Republic of Wellbeing?* 

#### 6. Roundtable discussion and wrap-up

László Pintér invites the presenters for some reflective comments.

Marc Levy: We are in a period of rapidly expanding complexity of the development agenda and the data agenda. Political and analytical strategies are needed to reduce these complexities. From an analytical point of view, it is questionable whether integrated optimization, as highlighted by David, can reduce this complexity and can be rolled out around the globe. From the perspective of risk management, there is no need to consider all risks, one can focus just on the key risks. I would love the Republic of Wellbeing to come into existence but would also like to raise alternative bottom-up strategies and assign more rights to individuals. Imagine a universal human right to understand risks across all domains, this would make a difference.

David O'Connor: I would like to stress the need to manage complexity and interrelatedness. This needs to be done by each country on its own terms and broad consultation around policy priorities are needed. We can no longer say that we are not aware of the interdependencies and we should at least flag where and how they matter, whether there are synergies or trade-offs.

Enrico Giovannini: First, we would like to have fully fledged integrated models to do forecasting, backcasting, simulation and so on. This does not mean that we should wait for these models before

we can think in an integrated way. Examples were shown today, and there are more, showing how we can start thinking in different ways even without detailed analytical models. Second, in terms of capacity building there is a huge challenge but also opportunities. The EU is spending over 80 billion in the Horizon 2020 programme for research and innovation, which is also open to non-EU countries. We should think about how to reorient funding schemes so that they can also benefit less developed countries.

László Pintér: I used to talk about an 'indicator zoo' that developed over the last decades and associated complexities and opportunities. The SDGs has led to creation of another parallel 'zoo' with its own challenges and opportunities. Models are other tools are not necessarily created to handle these complexities. IA is a field that explicitly recognizes and helps to handle this complexity.

In the first presentation, we heard about the exploding universe of data and indicators, institutional capacities and new constellations of institutions, including grass-roots organizations. In the second talk, we heard about the real and conceptual network maps of the goals. Different organizations can zoom in on different segments of that map, look through own lens, analyse synergies and interlinkages in their own context. The third presentation provides us insights into hypothetical Republic of Wellbeing and how the changes implicated by the SDGs affect the structure of government and governance, change the societal debate and requires rethinking existing models.

Finally, we need to think about theatres where discussions about SDGs, well-being, sustainability can take place both at the strategic and at the societal level. Universal SDGs provide an enlarged context and the fairly open, participatory process in which they were developed raised expectations. The UN and international organizations, however, do not implement the SDGs. Top-down intentions need to meet bottom-up energy.

The next webinar will be on the  $12^{th}$  of April 2016 and will look more closely at IA tools for the SDG implementation.

Close of webinar.

Link to recording: <a href="https://webconf.vc.dfn.de/p9nqifbigrt/">https://webconf.vc.dfn.de/p9nqifbigrt/</a>

Link to programme and presentations: <a href="http://www.tias-web.info/tias-activities/webinars/#5th">http://www.tias-web.info/tias-activities/webinars/#5th</a>

#### **Background material for the next webinar:**

<u>Sustainable Development Goals in the Netherlands</u> by the Netherlands Environmental Assessment Agency on the implications of the SDGs for environmental policy in the Netherlands.

Integrated model for Sustainable Development Goals strategies iSDG: www.isdgs.org

#### Annex: List of webinar organizers, presenters and participants

#### **Organizers:**

László Pintér (chair)	Professor, Central European University and Senior Fellow & Associate, International Institute for Sustainable Development
Livia Bizikova	International Institute for Sustainable Development
Jan Bakkes	Vice-president, TIAS and Advisor, Netherlands Environmental Assessment Agency (PBL)
Caroline van Bers	Programme director, TIAS and Researcher, Institute of Environmental Systems Research, University of Osnabrück
Joanne Vinke-de Kruijf	Secretary, TIAS and Postdoctoral Researcher, Institute of Environmental Systems Research, University of Osnabrück

#### **Presenters:**

David O'Connor	Former Chief, Policy Analysis and Networks Branch, UN DESA
Marc Levy	Deputy Director, Center for International Earth Science Information Network (CIESIN), Earth Institute, Columbia University
Enrico Giovannini,	Professor, University of Rome "Tor Vergata", Former Minister of Labour and Social Policy, Italy

#### **Participants:**

NB: Below are listed (alphabetically by first name) those who attended the webinar as registered participant. In addition, the following non-registered participants attended the webinar: Anna Dimitrova, Hoseok Kim, Jacques Prescott, Karl Peet, Lars Mortensen, Liam Sollis, Maria Ceorvo, Matteo Pedercini, Mélisa Cran, Kristin Rut Kristjá-Sdóttir, Stuart and three guests (names unknown).

Andres Romero Cortina	Sustainability and climate change manager, PricewaterhouseCoopers AG Ltda
Anita Pirc Velkavrh	Project manager - Forward looking studies, European Environmental Agency
Attila Katona	Project Manager, The Regional Environmental Center for Central and Eastern Europe, Hungary
Bill Cosgrove	Ecoconsult and IIASA
Claudia Pahl-Wostl	Institute of Environmental Systems Research, University of Osnabrück and Vice-President, TIAS
David Berry	Manager and Facilitator, Sustainable Water Resources Roundtable

Elisabeth Resch	Sustainability Coordinator, Global Compact Network Canada
Elissar Sarrouh	Professor of Practice, Institute for the Study of International Development - McGill University, Montreal, Quebec, Canada and Chief Executive Officer, Expert on Governance Consulting Inc., Ottawa, Canada
Elizabeth Odunlami	UNCTAD
Fabian Heitmann	PhD. Candidate, Institute of Environmental Systems Research, University of Osnanbrück
Fina Ambatlle	Project manager at the Advisory Council for Sustainable Development of the Catalan Government
Francisco Brzovic Parilo	Center on Public Policy Analysis, Institute on Public Affairs, University of Chile
Gabriel Moncea	Sustainable Lifestyle Association, Bucharest, Romania
Gisele Müller	Economics and Trade Branch, Economic Research Unit, United Nations Environment Programme
Ha Hoang Thanh	Nexus for Development, Singapore
Illias Animon	Forestry Officer, FAO Forestry Department, Italy
Inês Raimundo	Eduardo Mondlane University, Maputo, Mozambique
Íngrid Vives Rubio	Àrea de desenvolupament sostenible, Direcció General de Polítiques Ambientals, Secretaria de Medi Ambient i Sostenibilitat
Ira Matuschke	Institute for Advanced Sustainability Studies
Jo Rowbotham	CEO, Te Whiti (Sustainable Growth), India
Johan Larsson	PhD Student, Chalmers University
Johannes Halbe	PhD candidate, Institute of Environmental Systems Research, University of Osnabrück
John Callewaert	Director, Integrated Assessment, <u>Graham Sustainability</u> <u>Institute</u> , <u>University of Michigan</u>
John W Coombs	Manitoba Environmental Network, Ontario Environmental Network, Canadian Environmental Network, Canada
Klaus Jacob	Director, Environmental Policy Research Centre, Freie Universität Berlin and President, TIAS
Krista Heiner	EcoAgriculture Partners
Leah Feor	independent student, researcher, and teacher, www.simplysustainableblog.com
Malvika Monga	UNCTAD
Mark Jensen	UNEP on an Interface Ontology for the SDGs
Martin Kowarsch	coordinatior of the joint UNEP-MCC research initiative on the Future of Global Environmental Assessment Making (FOGEAM)
Mary Scott	University Women's Club of Winnipeg, and with the Institute for International Women's Rights - Manitoba, and the National Council of Women of Canada
Mateja Penava	Central European University
Nicholas Watts	Visiting Fellow, University of Bristol and Joint Coordinator, UN SIDS Partnership 'Learning from the Sharp End of

	Environmental Uncertainty in SIDS'
Nicolas Escalante	Senior Consultant - RRA (Public Law + Social Innovation)
Paola Fajardo	McGill University, Montreal, Canada
Patrik Ausderau	Biovision Foundation for ecological development, Switzerland
Paul Lucas	PBL Netherlands Environmental Assessment Agency
Pervez Hassan	United Nations Development Group, USA
Peter Haas	Department of Political Science   UMass Amherst
Pier Luigi Buttigieg	UNEP on an Interface Ontology for the SDGs
Raquel Ballesteros Arenas	Advisory Council for Sustainable Development of Catalonia
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Tiina Hayha	Stockholm Resilience Centre
Valentino Piana	Economics Web Institute