



Task Group on catalysing science-based policy action on SCP

5th call 8th July 2020

MINUTES

Attendees:

Government:

- Argentina: Alicia Moreno
- South Africa: Rhulani Baloyi

Business/private sector:

- Saudi Green Building Forum, Saudi Arabia: Faisal Alfadl
- Centre for Responsible Business, India: Rijit Sengupta

Civil Society:

- WWF: Martina Fleckenstein
- WRF: Bas de Leeuw

United Nations system and intergovernmental organizations

- UNEP: Elisa Tonda, Claire Thiebault, Marina Bortoletti, Jonathan Duwyn
- European Commission: Luca Marmo; Jesus Maria Alquezar

Expert of the International Resource Panel

- Jeffrey Herrick, Soil Scientist USDA-ARS Jornada Research Unit New Mexico State University

Co-Chair of the International Resource Panel

- Izabella Teixeira, former Minister of Environment, Brazil

10YFP Secretariat: Samantha Webb; Yulia Rubleva; Cecilia Lopez y Royo

IRP Secretariat: Maria Jose Baptista; Kirsten Virginia Glenn

Full presentation prepared for the Call is available [here](#)



OUTCOMES OF THE ONE PLANET & IRP ONLINE MEETINGS

ONE PLANET NETWORK

- One of the sessions of the Executive Committee¹ meeting of the One Planet network was dedicated to the work of the Task Group. Task Group members helped shape the session, presented the progress achieved and moderated the discussions.
- Main elements that came out of the Session are:
 - **Value-chain approach:** the approach is appreciated and endorsed by the Executive Committee of the Network as a way to generate holistic, evidence-based solutions.
 - **Consultations:** the Committee made a number of suggestions and recommendations for the consultations related to stakeholders to be engaged and key fora/events to leverage
 - **Programme application:** programmes have initiated discussions on how the evidence-based information generated through the Task Group can be applied in their work
 - **Foundational element:** the Committee recognized the work on catalyzing science-policy action as a foundational element for the 10YFP post-2022

INTERNATIONAL RESOURCE PANEL

- The IRP met online in a series of sessions meant to discuss specific terms of reference for the work that needs to be advanced.
- It included the discussion on the 2020 Strategic Planning Exercise. It takes place every 4 years to help identify strategic and thematic priorities of the Panel for a 4-year cycle, in this case 2022-2025.
- Task Group members will be invited to participate in consultations for the 2020 Strategic Planning Exercise – e.g. a survey on feedback on the implementation of 2018-2021 Work Plan; discussions on how to increase the impact of science-policy platform and effectiveness of IRP reports.
- Results of the work of the Task Group will be integrated in the 2022-2025 Work Plan of the Panel. In particular, the process of reports' development based on lessons learned from the Task Group.
- Annual Meeting of the IRP will take place in Q4 of 2020. Members of the Task Group are invited to provide inputs to the session dedicated to the Task Group at the Annual Meeting.

PLANNING FOR THE CONSULTATIONS

- The work on 3 sectors (Food Systems; Textiles; and Buildings and Construction) that are the focus of the Task Group are at different stages of the [Systemic and Value Chain Approach](#) applied
- The Executive Committee of the One Planet network including the members of the Task Group provided input for expert and multi-stakeholder consultations for Food Systems and Textiles: *(the table combines inputs received prior to as well as during the 5th call of the Task Group)*

	Food Systems	Textiles
Dates	October & November 2020 (dates tbc): leverage the preparatory steps and consultations of Sustainable Food Systems programme conference in end-November	September 2020 (date tbc): workshop to define scenarios for modelling to assess the impact of different economic models in the textile value chain

¹ Executive Committee of the One Planet network is composed of: Intergovernmental Board; Leads and Co-Leads of the Multi-stakeholder thematic programmes; UN Agencies



<p>Organizations to engage</p>	<ul style="list-style-type: none"> • Reflect complexity and multi-dimensional aspect of food • Actors along the value chain, in partic. processing, retail & food services • SFS Programme Advisory Committee • Other Programmes: e.g. Working Group on Food in public procurement & tourism • FOLU – food and land use programme • World Benchmarking Alliance 	<ul style="list-style-type: none"> • UNEP expert community, comprising industry, governments, international organizations, advocacy groups, fashion institutes, certification bodies • Interested One Planet Partners, notably from the SPP, CI and Lifestyle Programmes. • IRP experts • Fashion for Good- a platform for sustainable fashion innovation • Sustainable Apparel Coalition
<p>Fora/Events to leverage</p>	<ul style="list-style-type: none"> • 3rd global conference of Sustainable Food Systems Programme (incl. science track) • UN Food Systems Summit 2021 • Food Systems Dialogues • Committee on world security • Explore inputs to negotiations • Annual Sustainable Business conference of Centre for Responsible Business 	<ul style="list-style-type: none"> • UNCCD: focus on food, feed, fibre ; video featuring the UNEP textile work is available here.
<p>Other aspects to consider</p>	<ul style="list-style-type: none"> • Establishing a strong link with Global Conference of the SFS Programme and the UN Food Systems summit is considered important. The Task Group is ready to provide input to the preparations of the Conference and SFS work linked to the Summit. 	<ul style="list-style-type: none"> • Fashion industry is a high impact one and is looking for new sustainable approaches for its relationship with consumes post-COVID 19. Working with business sector on fashion-related messaging that is easy to understand to shift the needle towards sustainable fashion is essential.

REVIEW OF DATA – CONSTRUCTION VALUE CHAINS

- Preliminary review and mapping of the data is based mainly on IRP reports and is linked to resource use, environmental impact and beyond at different stages of the value chain.
- When it comes to the construction sector it is important to differentiate between resources and materials. The data shows that: 50% of all global material footprint is consumed by the construction sector (SCP-HAT), and 30% of global resource consumption is by the construction sector (UNEP)
- Data availability and Gaps:
 - **City level rather than sector-level:** IRP reports take a city-level approach which is far broader than just the construction sector. As a result, there is limited specific information and data on the natural resource use and environmental impacts of this sector.
 - **Case Studies and anecdotal evidence; lack of data on material stocks and flows:** Much of the reports are based on case studies and anecdotal evidence from specific cities, not necessarily quantifiable, comparable or verifiable. Lack of existing data on material stocks and flows at the city-level.
 - **Focus on energy and emissions, not materials and resources:** Data focus across reports is primarily on energy use in construction and operation of buildings. Less available information on other resources/ materials and the related environmental impacts at extraction, processing, end-of-life.
 - **Urban-rural nexus not captured:** Focus on cities does not connect construction in cities to the rural ‘sources’ of natural resources and raw materials and ‘sinks’ for waste



- Main **natural resources** used in the sector are: **Land** on which to construct buildings and infrastructure; **Water** to extract and process materials, construction buildings and infrastructure, power ongoing operations; **Fossil Fuels** to assure energy to extract and process materials, construction buildings and infrastructure, power ongoing operations; **Minerals** when it comes to extraction and processing of minerals including alumina, bauxite, iron ore, limestone, coking coal to create building materials like steel, aluminium; **Sand** dredged from riverbeds, lakes, beaches to be processed into cement; **Forest** for timber from trees in natural forests, or commercial forestry.
- Main **materials** use in the sector are: **Concrete** (sand, water, lime and energy); **Steel** (iron ore and cooking coal; energy); **Aluminium** (alumina and bauxite; energy); **Timber** (trees - natural and industrial forests; energy); **Glass** (sand, sodium, carbonate, lime and energy).
- The reports analysed do not have the information that would allow to understand how and where the resources are extracted, where they are consumed, what is the status of these resources, what is the environmental impacts around the production of the materials, etc.
- Global construction industry currently consumes: 40% of water; 70% of timber and 45% of energy. In addition, existing building contribute 24% of global CO2 emissions
- **Environmental impact** the sector causes are: **Deforestation** - De-densification, urban sprawl, more land used for building and infrastructure; **Biodiversity loss** - when land is converted to be used for building & infrastructure, most of the original plant, animal and insect life is removed; **Water & Air pollution** - Reduced water availability, reduced water quality from pollution, increased air pollution from material processing, construction & operation; **GHG Emissions** - Energy and direct emissions from material extraction and production, energy in construction and operations
- The analysis suggests that the **construction value chain** can be presented through **8 stages**:
 1. **Financing**: Private investors (individual / institutional), property developers, government stimulus and fiscal policy (city/state/national)
 2. **Design & Planning**: consultants, urban planners, government authorities (local, regional, national, global)
 3. **Materials**: Material extraction, processing, production, manufacturers
 4. **Property Market**: Property developers, banks & financial institutions, real estate brokers, buyers
 5. **Logistics**: Equipment, suppliers, wholesalers
 6. **Construction**: Contractors, sub-contractors, developers, architects
 7. **Operation/Consumption/Maintenance**: Individuals/residential, private business, public facilities / service providers
 8. **End-of-life**: Operational waste, building end-of life / renovation
- The construction value chain is not linear: many different stages take place at the same time with the same value chain actors involved at various stages, interacting with each other.
- Country-specific aspects are important. For example, 2/3 of countries do not have mandatory buildings codes, while these are the countries where most of the construction will happen.
- The most resource-intensive stages of the value chain are: Materials; Construction; and Operation/Consumption/Maintenance. While the decisions that impact the material use are made at other stages, more specifically: Financing; Design and Planning; and Property Market
- It is essential to consider the whole lifecycle and to understand how decisions, that are made very early on, can have big consequences for the natural resource use and environmental impacts at both construction and operation stages of the value chain.
- **Applying the systems lens to the Construction value-chain.** Drivers include:
 - **Demographics**: Population growth, growing middle class, urbanization, de-densification
 - **Market Forces**: Property prices, private development, credit/debt, real estate market



- **Environment:** Natural resources, ecosystem services, biodiversity, climate change
 - **Fiscal Policy:** Government fiscal stimulus and regulatory stimulus to construction sector
 - **Infrastructure:** Roads, ports; communication networks, energy grids
 - **Policies and regulations:** Taxes and subsidies, zoning, safety regulations, building codes, financial regulations
 - **Sociocultural aspects:** Social norms and values; consumer behavior, trends; aspirations
 - **Science & technology:** Research & development; innovation; information, design trends, new material formulations e.g. timber, cement
- IRP report: “In essence, governance and planning systems are responsible for the way infrastructure are configured which, in turn, conduct the flow of resources through urban systems”
 - Infrastructure spending is often used by governments during economic crises as fiscal stimulus packages to boost employment and consumption in the economy and drive recovery. With built environments having an average lifetime of around 100 years, these decisions have a significant impact on natural resources and the environment and thus need to be addressed at early stages prior to construction and operation where most resources are used.

DISCUSSION

- A big concern of the construction sector are existing buildings and their impact. A problem of re-designing rather than designing needs to be addressed.
- Member of the task group highlighted that the property markets stage of the value chain has a strong influence not only on environmental impact of the sector but also on impacts related to social aspects and health. Therefore, this stage should be given a greater importance.
- Human element, specifically in relation to labour should be emphasised more in the value chain presented, especially in the Construction stage.
- Material that should also be considered for the construction sector is marble and natural stones overall that are broadly used in the construction sector and have a complex value chain.
- Building codes are essential to influence the sector and introduce sustainability
- Informality and illegality of the construction sector needs to be considered. For example, when it comes to deforestation specifically in developing countries.
- The EU started a Renovation Wave programme dedicated to existing buildings, that are resource intensive, especially in the use of energy and water. The objective is to double the renovation rate of the existing building stock. The results of the programme can be shared with the Task Group
- It is important to recall that the idea behind the UNEA4 resolution request on creation of the Task Group was the management of natural resource use including raw materials in relation to Agenda 2030. So the work of the Group should consider the link to Agenda 2030 not only in terms of environmental aspects, but also in terms of socio-economic ones in the 3 selected sectors.
- Benefits of circularity should be embedded in the work of the Task Group in relation to all 3 sectors.
- The importance of finance depends on where you are in the construction development cycle. In some countries rehabilitation of existing buildings can have a bigger effect, while in other countries, such as China and the USA finance can strongly drive the development of unused space.
- Information sources suggested by the Task Group Members:
 - Steel Stewardship Council, Aluminium Stewardship Council, Forest Stewardship council
 - Roundtable for Sustainable Biomaterial
 - Global Infrastructure Basel
 - Laudes Foundation
 - Dutch Government Covenant on Natural Stone
 - TruStone Initiative



- 2020 Global ABC status report
- Circular Built Environment reports of the SBC Programme

PLANNING FOR THE UNEA5 REPORT

- Indicative timeline for internal submission of the report for UNEA5 is 1st week of November. Accordingly drafting and review of the report will take place between now and the submission date. A preliminary draft / outline of report is planned to be shared to the Task Group mid-September.
- As timeline is relatively short, some aspects of the work of the Task Group, such as the consultations will not be ready by the 1st of November. The Task Group will continue with the agreed approach as there will be further opportunities to present the progress to UNEA 5, other than the report.
- Following the discussion during the 5th call of the Task Group, the proposed elements to be included in the report are:
 - Overview of the systemic and value chain approach – as the interface between the work of the International Resource Panel and the work of the One Planet network
 - The systemic and value chain approach in practice: applying it to Food Systems, Textiles, Construction value chains.
 - Natural Resource Management and Agenda 2030; including data needs and gaps to be addressed for an effective science-policy interface

WRAP-UP AND NEXT STEPS

- Task Group members are invited to share suggestions for stakeholders to engage in consultations for the sectors of food and textiles as well as fora/events to leverage
- Task Group members are invited to share sources of information on resources, materials and environmental and socio-economic impacts related to the construction sector
- Task Group members to inform the Secretariats of their preferred sector in which to be engaged in for the consultations
- Representative of WWF to inform the Task Group on the input needed for the preparation of the Global Conference of the Sustainable Food Systems Programme.