

Workshop: Pre Partner-Event of EcoBalance 2024

Achieving Resource Equity in a Decarbonized Future: Bridging Global Gaps in Information and Policy

Organiser: Material flow innovation research program of the National Institute for Environmental Studies (NIES), Japan

Access

Time and Date: 13:00 - 16:30 at 3rd (Sun) Nov. 2024

Venue: Sendai International Centre (Sendai, Japan), Aobayama, Aoba-ku, Sendai 980-0856, Japan (<https://www.aobayama.jp/>)

Registration: Required (<https://forms.gle/PTXECsa57Sp4KzeS7>)

Registration fee: Free of charge

Language: English (with simultaneous interpretation into Japanese)

Background and aim of the workshop

Modern affluence is sustained by vast resource consumption. Currently, the material footprint, i.e. the total resources consumed both directly and indirectly varies drastically between high-income and low-income countries, with a difference of up to six-fold. Achieving a decarbonised society will require significant reductions in natural resource use, and a critical step toward this goal is the increased utilisation of secondary resources through the transition to a circular economy. However, many of today's circular economy initiatives focus on securing domestic resources. Under this approach, wealthier countries with ample resource stocks could continue to exploit them, while low-income countries with limited stocks may struggle to access essential resources.

If countries pursue a circular economy solely to reduce resource consumption without addressing resource usage and future needs, the global resource gap could persist or widen. This disparity could have lasting effects on future generations especially in low income countries, limiting access to energy, infrastructure and overall quality of life, thereby exacerbation intergenerational inequity.

In this workshop, we will explore the concept and importance of 'resource consumption equity' in the context of a decarbonized society. We will also examine the development of a framework to define and measure equity in resource consumption.

Program

(as of 10/10/2024)

Opening (13:00 - 13:10)

Prof. Keisuke Nansai

Director, Material Cycles Division, National Institute for Environmental Studies (NIES), Japan
Panel member of the UNEP International Resource Panel

Keynote lecture 1 (13:10 - 13:40)

Speaker: Dr. Heinz Schandl

Senior Principal Research Scientist and Circular Economy Lead, Sustainability Pathways Program, Environment Research Unit, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia; Adjunct Professor of the Graduate School of Environmental Studies, Nagoya University; Panel member of the UNEP International Resource Panel

Title: Towards Resource Equity: Bridging Global Disparities for a Just Sustainability Transition: Findings of the Global Resources Outlook 2024

Abstract:

This presentation examines the distribution of natural resources among nations, focusing on how equitably these resources are shared. Achieving sustainable development in the Global South requires that the benefits of natural resource use be distributed fairly, guided by ethical principles rather than relying solely on market forces. Drawing on the UNEP Global Resources Outlook 2024, we highlight disparities in resource access between high- and low-income nations, as well as between net resource importers and exporters, and the Global North and South.

We explore how a sustainability transition, driven by ambitious policies for resource efficiency and climate mitigation, can help bridge these gaps, while questioning whether current efforts are sufficient to achieve true resource equity and enable collective progress toward the Sustainable Development Goals (SDGs). In this context, we also assess the existing knowledge on global resource consumption, the tools available to evaluate resource inequality, and the policy mechanisms that could promote a fairer distribution of resource benefits, ensuring improved living standards and wellbeing within the constraints of a planet with finite resources.

Keynote lecture 2 (13:40 - 14:10)

Speaker: Prof. Zhi Cao

Professor, College of Environmental Sciences and Engineering, Nankai University, China

Title: Balancing Resource Stocks to Bridge the Global Resource Divide

Abstract:

The pronounced disparity in resource stocks between high-income and low-income nations underscores the urgent need for equitable resource distribution to support a decarbonized society. In this presentation, we will highlight the role of resource stocks in defining the global resource divide and delve into methodologies for estimating these stocks, with a specific focus on bulk materials. We will detail the significant gaps in resource access between the Global North and South and assess the potential of circular economy measures to bridge these divides. We will discuss how such disparities can

perpetuate global inequities and impede sustainable development. By examining the interactions between resource stocks and circular economy measures, we aim to identify effective strategies to address the resource divide and promote fairness in global resource distribution.

Break (14:10 - 14:20)

Keynote lecture 3 (14:20 - 14:50)

Speaker: **Prof. Narasimha D. Rao**

Associate Professor of Energy Systems, School of the Environment, Yale University, USA, Senior Research Scholar, International Institute for Applied Systems Analysis, Austria

Title: Energy and Social Inequality: Implications for Fairness in Resource Inequality

Abstract:

The energy transition entails a shift in material resource use from fossil fuel extraction to the supply of renewable energy generation technologies. This shift will take place in a global society with high levels of income and energy inequality, both of which will likely be subject to change from this shift in material use. Some other aspects of the energy system, on the demand side, may stay the same, but would also require transformation if we want to pursue 'resource sufficiency' or reduce past inequalities in service provision and well-being. How should we think about fairness in resource use in this context of overlapping inequalities?

In this talk I will start with describing the relationship between energy and social inequalities and how energy justice has been framed, including in my own work in the 'Decent Living Energy' project. I will then propose which aspects of these understandings are transferable to future resource allocation and which are not. I will discuss the positive sustainability benefits of equitable energy transitions and how that influences how we think about equity in resource consumption.

Keynote lecture 4 (14:50 - 15:20)

Speaker: **Dr. Keith Williges**

Scientist, Wegener Center for Climate and Global Change, University of Graz, Austria

Title: Incorporating fairness concerns into climate change mitigation and carbon budget allocation – potential applications for policymaking

Abstract:

This presentation introduces broad fairness considerations relevant to climate change mitigation policymaking. We focus on the allocation of a remaining global carbon budget and mitigation effort-sharing among countries; such partitioning is becoming a major challenge for implementation of climate policies around the globe. We first discuss a set of minimal fairness requirements for allocating a global carbon budget to remain within climate targets and demonstrate how different understandings of fairness can lead to large differences in budget allocation.

However, the relative importance of individual fairness considerations and how they are implemented is debatable. To address this, we develop a framework that can be applied to a number of resource- or effort-sharing problems at different governance levels. The resulting method identifies distributions that are a least-regret compromise between different ideas on what a fair allocation should be – illustrated for the case of the European Union’s emissions-reductions targets to 2030 – and can easily be adapted to inform debates on sharing effort among subsidiary entities.

Break (15:20 - 15:30)

Group work or panel discussion (15:30 - 16:25)

Closing (16:25 - 16:30)

Prof. Seiji Hashimoto

Professor, College of Science and Engineering Department of Civil and Environmental Engineering,
Ritsumeikan University, Japan.

Panel member of the UNEP International Resource Panel