## **Program**

# Economic Planning in the Anthropocene

Institutional design for needs satisfaction within boundaries



#### Conference 24-25-26 September 2025

Young Scholar Workshop Roundtable with Policymakers

Organizing Committee: Hannah Bensussan, Cédric Durand and François-Xavier Hutteau Julia Steinberger Edward Nik-Khah Razmig Keucheyan Silvia Rief Julien Lefèvre Clément Surun Elena Hofferberth Louison Cahen-Fourot Rosie Collington Cecilia Rikap Tom Krebs Daniela Gabor Nelo Molter Magalhães Cornel Ban Edouard Morena

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Painting: Fu Baoshi, *Heaven and Earth Glow Red*, 1964 Graphic design: Stéphane Dupont, Paris











### Economic Planning in the Anthropocene

Institutional design for needs satisfaction within boundaries

#### Organizing committee:

Cédric Durand and François-Xavier Hutteau (DEHES, UNIGE) Hannah Bensussan (Università di Modena e Reggio Emilia, Italy)

#### **Dates and Place**

24/25/26 September 2025 – Université de Genève

#### Purpose

With growing ecological concerns and mounting scientific evidence of rapid environmental degradation, governments have created multiple institutions, engaged in a vast array of policies and supported business initiatives. However, and despite some limited success in specific dimensions, the balance of five decades of activism is unambiguous: governments and businesses have failed to transform our economy in order to accommodate the ecological limits (Pestre 2020).

This failure calls for significant revisions in the way policymaking addresses the society-nature metabolism and, more specifically, the approach of institutional design regarding the economy. The return of industrial policies (Criscuolo et al. 2022) and the acknowledgment that climate action must be primarily driven by public policies (Pisani-Ferry and Mahfouz 2023) echoes a renewed interest for economic planning as a way to engage the ecological bifurcation (Durand, Hofferberth, and Schmelzer 2024; Durand and Keucheyan 2024).

This workshop ambitions to mark a milestone in that direction. It will gather leading scholars from both sides of the Atlantic and from various disciplinary backgrounds (political economy, sociology, economic history, law, accounting...) whose research could inform the design of ecological planning institutions in the short to medium term. The core of the conference (tentative program below) will favor in-depth engagement with the various communications with a dedicated moment (assessment roundtables) to take stock of the substance of the exchanges and clarify the complementary and tensions between contributions.

Two side events will take place. On the eve of the conference a Ph-D workshop will be organized with the support of the EU MSCA-funded EPOG-DN (Economic Policies for the Global bifurcation - Doctoral Network). The last day of the conference, a forum will be organized with policymakers, including representatives from various international institutions (UNCTAD, ILO, UNDP...)

### Wednesday September 24

#### 14h-18h

Young scholar seminar with the participation and support of the EPOG Doctoral Network

### **Thursday September 25**

8.45

Welcoming coffee

9.00

Introductory address
Cédric Durand (UNIGE, Switzerland)

#### 9.15-11.00

Climate vs. Neoliberalism: causes of inaction and the call for planning

Julia Steinberger (UNIL, Switzerland)

The Great Transformation of markets: Lessons from the history of market design

Edward Nik-Khah (Roanoke College, United States of America)

11.00

Coffee break

#### 11.15

Needs, institutions, and coalitions: how would democratic ecological planning look like?

Razmig Keucheyan (Université Paris Cité, France)

Between calculation and deliberation: Rethinking needs in planning frameworks

Silvia Rief (University of Innnsbruck, Austria)

#### 13.00

Lunch break

#### 14.30

The Role of Input-Output Analysis in Modeling Sustainability Transitions

Julien Lefevre (CIRED, France)

Accounting for national and corporate environmental liabilities: a steering tool towards a sustainable economy

Clément Surun (CIRED, France)

16.30

Tea break

#### 16.45-18.00

Assessment Roundtable

Louison Cahen-Fourot (Roskilde University, Denmark) & Elena Hofferberth (UNIL, Switzerland) and speakers of the day

20.00

Dinner

### Friday September 26

9.00

Welcoming coffee

<u>9.15</u>

State Capacity for Decarbonization: From Investable Transitions to Green Transformations

Rosie Collington (Copenhagen Business School, Denmark)

Big tech capabilities as planning devices
Cecilia Rikap (UCL Institute for Innovation and Public Purpose, United Kingdom).

11.00

Coffee break

11.15

Price Controls to Implement Green Transformation Policy Tom Krebs (University of Manheim, Germany)

Macrofinancial conditions for a green transformative state Daniela Gabor (University of the West of England, UK)

13.00

Lunch break

14.30

The State, the territory and the infrastructure legacy Nelo Magalhães (EHESS, France)

When Marx Met Schumpeter: Planning and Cleantech Dominance in China

Cornel Ban (Copenhagen Business School, Denmark)

16.30

Tea break

16.45-18.15

Forum with policymakers
Edouard Morena (University of London in Paris, France)

18.45

Cocktail Dinner

#### **Abstracts**

Climate vs. Neoliberalism: causes of inaction and the call for planning – Julia Steinberger (UNIL)

Starting from a political economy history of the production of the climate and ecological crises, we first focus on the recent history of neoliberal ideological domination. It is well-known that neoliberal ideas were shaped within the Mont Pélerin Society, but their global domination owes much more to the Atlas Network: a shadowy international network of hundreds of "think tanks" in significant part funded by the fossil fuel industry, actively spreading neoliberal ideology alongside climate disinformation. In opposition to neoliberal dogma, we next present key results from the "Living Well Within Limits" and "REAL — A post-growth deal" projects: facing the climate crisis while providing decent living standards to all requires degrowth in richer countries, reducing inequalities, massive investment in efficient provision, especially in the global south, and re-orienting economic activities towards universal basic need provision.

**The Great Transformation of markets: Lessons from the history of market design** – Edward Nik-Khah (Roanoke College)

Two developments merit the careful attention of those advocating for economic planning to address the climate crisis. The first concerns the conviction that markets can be reformatted to improve the common good. Whereas markets and organizations were once understood as occupying opposite poles, now markets are now commonly understood to be deliberately organized and therefore potentially tuned for the benefit of all. Second, it has become increasingly common to evaluate the prospects for artificial intelligence, big data, and the platforms employing them via the language of markets. Both advocates and neoliberal critics of economic planning appeal to the digital platform for evidentiary support, a fact that provides some indication of how profoundly "markets" have changed in composition, purpose, and scope. While this transformation has undermined arguments often used by advocates for market design, accompanying it is a novel and corrosive political epistemology that also challenges the aspirations of those favoring planning.

Needs, institutions, and coalitions: how would democratic ecological planning look like? – Razmig Keucheyan (Université Paris-Cité)

20th-century economic planning has not only been productivist, i.e. aimed at indefinite growth, it has also mostly been non-democratic, i.e. top-down (in the case of indicative planning) or outright authoritarian (in the case of imperative planning). In the Anthropocene, however, planning should not only be ecological, i.e. compatible with ecosystemic limits, it should also be democratic, among other reasons because democracy is a way to generate and disseminate knowledge. This contribution aims at understanding how democratic ecological planning can be designed. Identifying "real needs" is the central goal of democratic planning.

It requires dynamic arrangements of institutions and political coalitions. French postwar planning will provide me with a concrete historical case to anchor my analysis.

#### Between calculation and deliberation: Rethinking needs in planning frameworks – Silvia Rief

Proposals for economic and ecological planning fundamentally aim to organize economic activities in ways that fulfill human and social needs while remaining within ecological limits and planetary boundaries. Contemporary approaches to this challenge diverge—or at times converge—on two primary strategies: the algorithmic calculation of needs and deliberative processes that politicize and socialize them. The former often assumes the availability of comprehensive data on needs, which can be seamlessly integrated into information and production infrastructures. The latter, by contrast, presumes that deliberative bodies can readily reach consensus on the common good, social needs, and consumption allowances.

In this presentation, I will examine how various proposals for economic and ecological planning conceptualize and operationalize the notion of needs within their frameworks. I will critically evaluate the strengths and weaknesses of these approaches, including their underlying assumptions, sociological oversimplifications, and unresolved ambiguities. Drawing on the theoretical contributions of Menger, Polanyi, Neurath, Hirschman, Arendt, and Fraser, I will propose key principles for integrating ecological and social accounting schemes. Additionally, I will consider the design of calculative tools and the structuring of democratic deliberative processes.

# **The Role of Input-Output Analysis in Modeling Sustainability Transitions** - Julien Lefèvre (CIRED)

Technology-rich Integrated Assessment Models (IAMs) and Environmentally-Extended Input-Output Analysis (EEIOA) are widely used tools for sustainability analysis, each offering unique strengths. IAMs are the primary approach for assessing forward-looking climate and energy scenarios, typically focusing on technological change and economic costs within a narrow neoclassical framework. In contrast, standard EEIOA enables more comprehensive but static assessments of environmental and socio-economic impacts across supply chains and sectors, adopting a lifecycle perspective. In this presentation, I will explore how advanced EEIOA—especially when combined with IAMs and other modeling approaches—can support the development of transition scenarios that prioritize human needs satisfaction within ecological limits. Drawing on a range of examples, I will illustrate the expanded role of input-output analysis in evaluating multidimensional sustainability outcomes, calculating lifestyle shifts and service provision for sufficiency, and informing structural changes aligned with a post-growth economic paradigm. These emerging approaches provide critical insights for shaping effective economic and ecological planning, and may play a pivotal role in guiding future sustainability transitions.

# Accounting for national and corporate environmental liabilities: a steering tool towards a sustainable economy – Clément Surun

Despite many advances, the ecological and climate crises remain challenges that are less well managed by public authorities than purely economic issues. Although still largely structuring to support public power in dealing with these latter issues, national accounting has encountered limitations (criticism of GDP as an obsolete indicator for measuring wealth, difficulties in the face of trade globalisation) which have weakened its scope as a planning tool. The failure to take account of environmental issues is one of the limitations often mentioned. To date, none of the proposals for integrating the environment into national accounting has yet managed to establish itself as a tool to support decision-making. Lack of legitimacy, relative disconnection from public policies, weak framing according to the principles of sustainability or a high degree of modelling are all reasons that weaken, for example, the new wealth indicators, genuine savings or the UN System of Economic and Environmental Accounts. The objective of this thesis is to equip public action with a national accounting system that allows for an ecological transition. We will try to show why and how articulating ecological debts and claims from the corporate to the national level can create an adequate tool for representation and discussion. This work is based on forays into the history of French national economic accounting to understand why an articulation between national and organisational levels was put in place. This legacy serves as a benchmark to question the opportunities for a similar environmental accounting extension. Two biodiversity-related policies are discussed: the management of aquatic environments and terrestrial biodiversity. Furthermore, because the quantification of the environment (particularly in monetary terms) is controversial, we analyse accounting conventions and the underlying management model (implicit or explicit) together. This work highlights the value of articulating national and corporate environmental liabilities to avoid a heavy reliance on modelling to estimate monetary values related to the environment. We also show that this can considerably strengthen the planning and management of transitions towards a sustainable economy, in coherence at both levels. Finally, basing such accounts on existing policies provides a political legitimacy that complements the scientific relevance claimed by our approach.

State Capacity for Decarbonization: From Investable Transitions to Green Transformations

- Rosie Collington (Copenhagen Business School)

Researchers increasingly invoke the concept of 'state capacity' to analyze how and when states pursue decarbonization policies, often drawing on models of late twentieth-century developmental states. Surveying the wider literature on climate governance and green industrial policy, I argue that economy-wide decarbonization constitutes a distinct governance challenge, requiring a reconceptualization of state capacity beyond thin notions of bureaucratic quality and fiscal resources. Decarbonization demands interdependent capacities for long-term strategic planning and inter-agency coordination, disciplining transnational capital, coalition-building and coercion of incumbents, ensuring public legitimacy, and adapting existing institutions and routines under uncertainty. Drawing on existing studies, I identify the institutional structures and capabilities underpinning these five capacities. I propose a research agenda centred on the politics of developing state capacity for *green transformations* – beyond building 'investable' projects in energy and transport – that pays close attention to inter-ministerial dynamics, budgetary regimes, and the influence of international climate finance.

#### Big tech capabilities as planning devices - Cecilia Rikap (University College London)

Debates on democratic planning have overlooked science and technology (S&T). However, on top of the known story of the US Department of Defense planning S&T throughout the Cold War, this millennium has seen the emergence of US Big Tech planning artificial intelligence (AI) and more generally digital technologies. This is only one of the four key reasons to argue that the AI value chain or stack could be a testbed for exploring an alternative.

The second reason is that the AI that Big Tech plans is the ultimate step of a lineage of ICT technologies aimed at not only replacing but also controlling labour. A third reason is that AI -and digital technologies more in general- has a huge ecological footprint. Leaving decisions about tech-related pollution and consumption of energy and water to a few corporate giants is already further stressing the planet. The fourth reason is that through controlling the whole digital technologies' stack or value chain, Big Tech is already subordinating states. Digital technologies are essential for governing at every level rendering states structurally dependent on a few corporate giants.

Against this backdrop, (how) could capitalist states become a driver of a form of S&T planning that counterbalances corporate planning of S&T? Answering this question offers a chance to explore the mechanisms, new institutions and legal devices that could make S&T planning led by the public sector democratic and ecological.

#### Price Controls to Implement Green Transformation Policy – Tom Kebs (Uni Manheim)

We argue that price controls for renewable energy are essential for a successful green transition. To this end, we develop a simple production model with an energy sector and show that price controls are socially optimal whenever self-fulfilling expectations generate endogenous (market-generated) price uncertainty. We provide evidence that endogenous

price uncertainty is a common phenomenon in energy markets during times of transformational change. We show the well-designed energy price controls generate large economic gains and accelerate the green transition towards climate neutrality. We also link our analysis to the so-called sunspot literature that was developed in the 1980s as a response to the rational-expectations revolution in macroeconomics.

#### Macrofinancial conditions for a green transformative state – Daniela Gabor (SOAS)

We live in a postneoliberal age, or so we often hear. The state again has transformative ambitions, guided by national security, SDG development, or (clean) industrialization priorities. Yet it faces one critical question: how to pay for transformation? The public money avenue necessitates reform of the macro institutional setup that separates monetary, fiscal, and industrial policies. Absent political will for this, there are two distinctive regimes in play. The tariff shock therapy of the Trump administration relies on realigning price signals, with the reinforcement of hegemonic power. The second, private money approach promotes new public-private partnerships where the state mobilizes (local/foreign) private capital by making strategic priorities "investible." The paper examines along three dimensions - the pace of structural transformation, the distributional tensions, and the geopolitical tensions in the context of great power competition — the contours of an alternative macro-financial framework that could support of a green transformative state.

#### The State, the territory and the infrastructure legacy - Nelo Magalhães (CRH, EHESS)

This presentation is based on an environmental history of infrastructures to consider the tension between the State as an institutionalised social relationship and the territory as a materialised social relationship. In particular, I will present an analysis of the dynamics of transport infrastructure in France after 1945. Using different examples of conflicts or crises, I will unfold the various key stages in their life cycle -construction, expansion and maintenance-and relate them to the evolution of French capitalism (i.e., accumulation regimes). I will show the material and symbolic work of the State to make these infrastructures desirable or neutral and to regulate the associated environmental conflicts (particularly over quarries). Aligning the expectations of individuals (or even their habitus) with the transformed territory is essential to the stability of accumulation regimes.

When Marx Met Schumpeter: Planning and Cleantech Dominance in China – Cornel Ban (Copenhagen Business School)

China's emergence as the world's cleantech superpower is often attributed to its industrial policy, "grand steerage", and vast domestic market. Yet these explanations overlook the pivotal role of its five-year planning system, which enabled the sector to grow from near irrelevance to global dominance in just over a decade. Rather than simply replicating the East Asian developmental state model, China refined it into a unique hybrid system—decentralized enough to encourage local experimentation but centralized enough to coordinate strategic support across the entire innovation-to-commercialization pipeline. This approach harnessed competitive dynamics among a sprawling network of firms, all operating within a permissive regulatory environment. Yet pushing these firms forward towards cleantech required a combination of monetary policy adjustments, fiscal subsidies, credit guidance, state-owned enterprise networks, government venture capital, and pervasive state shareholding. This was China's macrofinancially-charged planning apparatus and it executed three critical functions: directing risk capital to cleantech innovators, scaling up demand for green technologies across industries, and securing control over global supply chains for critical minerals. The outcome was a Schumpeterian surge of innovation egged on by a Marxist planned framework demonstrating how strategic state coordination can accelerate industrial transformation on an unprecedented scale.