

Session theme – Forum Innovation 2025

Financing, innovation policy and climate change

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It is widely acknowledged today that addressing the challenge of climate change requires a holistic approach, involving not only technological innovations but also societal and organizational changes, leading to the transformation of socio-technical systems that characterize our societies. Three observations can be made: i) the market alone cannot address these concerns; ii) current financial mechanisms and instruments are insufficient to effectively engage in addressing climate change and decarbonization; iii) central banks and financial regulators have a critical role to play in fostering orderly transitions and ensuring that the financial sector contributes to climate resilience and innovation. The purpose of this session is to reflect on the types of relationships and mechanisms to be implemented and co-constructed between climate change, innovation policies, and financing.

While public policies are increasingly seen as essential to the ecological transition and the fight against the climate crisis, crucial questions have emerged: which contents and shapes should public policies assume - for the energy issue, see for instance Amendola and al., 2024 -? What types of relationships between public and private actors would allow to best face the challenge of climate change? Firstly, according to some scholars, we are entering a new era of innovation policy, called "transformative innovation policies" (Schot and Steinmuller, 2018). New forms of engagement and interactions are required between public, private and third sector actors. At the same time new modalities of governance of transformation have to be designed (Weber, 2025). Secondly, the question of the state's role is also at the forefront of current reflections. The State should provide direction for tomorrow's major innovations in areas deemed crucial for the future and concerning major societal challenges (see Mazzucato, 2018). We must go further, moving the framework of economic analysis beyond market failures, toward a vision of co-creation and co-design of new markets (Liotard and Revest, 2024). However, one can fear the disappearance of freedom to experiment with new ideas and innovators' autonomy from governments (Foray, 2024). Thirdly, central banks and financial regulators play a pivotal role in shaping transitions toward sustainable finance,

ensuring that financial systems are aligned with climate objectives (see D'Orazio & Popoyan, 2019 and 2023). They have the capacity to influence how financial markets channel investments, reduce climate-related financial risks, and support innovative green financial tools. From integrating climate risks into monetary and macroprudential policies to fostering collaboration with public and private entities, these institutions can act as key enablers of the transition. Finally, the growing awareness of the negative social and environmental consequences of economic growth has led to an increasingly explicit emphasis on the need to develop social and environmental innovations to solve these problems (Dubocage et al. 2024). The need for social and environmental innovation is increasingly coming up against the drying up of public funding, and a growing demand for information from private funders on the real scope of environmental and societal initiatives. We are also gradually seeing a standardisation of the objectives of social and environmental innovations, in the wake of the definition and implementation of the United Nations' Sustainable Development Goals (SDGs) in 2015. Sustainable finance has developed in this context, marking the transfer of part of the financing of environmental and societal issues to the private sphere. The financing of common goods in the private sphere raises a number of questions that remain to be investigated (Dubocage and Gonzalez, 2025).

The questions addressed may include the following: what role do carbon markets play in financing innovation, and how can we address their current limitations? What role should central banks and financial regulators play in aligning financial systems with climate goals? How can macroprudential tools and monetary policies be coordinated to address climate risks? How can public policy best catalyze private investment in climate technologies? What tools and governance mechanisms between public and private actors? What lessons can be learned from successful innovation ecosystems in renewable energy and clean technology? What role do startups and new entrants play in driving climate innovation? What metrics should be used to evaluate the success of innovation policies in addressing climate change? How can private initiatives fit in with public initiatives in the context of sustainable finance? What are the consequences of privatising the financing of common goods such as the environment and social justice? How can we allocate capital and international transfers in the most efficient way to address this problem? What is the impact of national and international regulations?

The workshop welcomes diverse methodological approaches, including: empirical studies using both quantitative and qualitative methods, case studies, comparative analyses

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