

Description of the funded research project 2nd Call for H.F.R.I. Research Projects to Support Post-Doctoral Researchers **Title of the research project:** B.E.G.IN: Boosting Efficiency and Green Growth through induced innovation under Technological Heterogeneity. An Elusive Goal or a Feasible Reality?

Principal Investigator: Dr Nikos Chatzistamoulou

Reader-friendly title: Efficiency through Green Growth & Innovation

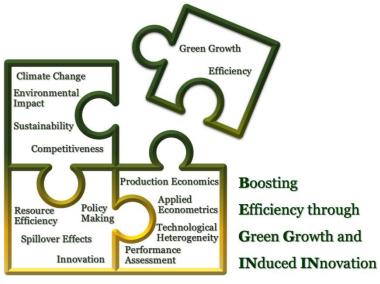
Scientific Area: SA.9 Management & Economics of Innovation

Institution and Country: University of Patras, Greece

Host Institution: University of Patras

Collaborating Institution: Athens University of Economics and Business, School of Economics, Research Laboratory on Socio-Economic and Environmental Sustainability, ReSEES

Project webpage: https://sites.google.com/site/chatzistamoulou/projects





Budget: €76,000

Duration: 36 months



Research Project Synopsis

The project concerns the inquiry of green growth and resource efficiency under technological heterogeneity through the lens of innovation to investigate the complex relationships and underlying mechanisms affecting the former. The recent policy framework of the Sustainable Development Goals Initiative and the recently launched European Green Deal, provides the ideal foundation for B.E.G.IN. to related the research conducted in its framework with the new growth strategy and make policy suggestions on the field. From an empirical evidence-based policy perspective, the project B.E.G.IN. aspires to shed light on the distorting role of technological heterogeneity in the quest of comprehending the patterns of green growth. In the same context, the project is aiming at bringing to the forefront the interplay between induced innovation, knowledge spillovers, resource scarcity and competitiveness among others, to advocate that the transition to a sustainable trajectory passes through a customized innervation instead of a one size-fits-all policy approach.



Project originality

The originality of project B.E.G.IN. is grounded on the thorough investigation of resource efficiency and its interplay with innovation, competitiveness, technological inequality, and knowledge spillover effects, taking into consideration the distorting role of technological heterogeneity. More precisely, the patterns of green growth are explored under heterogeneous hierarchical structures which has been neglected for the time being. It brings together concepts of production economics, innovation economics and economic growth, along with cutting-edge econometric techniques to unravel the complexity of the underlying relationships governing green growth. The latter become more prominent through the perspective of the recent policy framework of Sustainable Development Goals as well as that of the European Green Deal, which set in the centre of attention the concept of economic growth through cleaner production and resource efficiency.



Expected results & Research Project Impact

Regarding the list of expected outcomes, based on the technical report of B.E.G.IN., it is comprised by two technical reports, three submitted papers in peer-reviewed scientific journals of the field and two conference presentations. The scientific, academic as well as social impact of B.E.G.IN. is placed around comprehending the mechanisms affecting green growth and boost efficiency in the era of environmental degradation, climate change and resource scarcity in order to achieve a sustainability through a smooth transition. Project outputs are expected to be a valid source of information to policy and decision makers as well as the public audience about the necessity of promoting green growth to preserve scarce resources, mitigate climate change and environmental degradation in conjunction to the benefits of adopting green innovation and technology to achieve sustainability.



The importance of this funding

The significance of funding B.E.G.IN. research project, is multifold. First and foremost, research-wise, it sheds light to the concept and mechanisms of green growth through innovation and spillovers to achieve sustainability which is an underexplored area so far. Second, it can be seen as the workhorse to build a strong and solid research capacity, which in conjunction to the development of a research agenda pave the way to create a strong and independent academic profile aiming at producing high quality outputs consistently. Third, it contributes to the extroversion of the research activities of the Department of Economics, University of Patras whereas at the same time, the principal investigator acquires experience in project implementation and management, enhancing their academic profile setting the foundation for future academic career development.



