



Laboratoire d'Économie
Appliquée de Grenoble



Université
Grenoble Alpes



DefiCO2

Université Grenoble Alpes

TOPIC OF THESIS OR POST-DOCTORAL POSITION

Title: Ecological planning: theory and applications

Supervisor: Jean-Philippe Nicolai

Laboratory: Grenoble Applied Economics Laboratory (GAEL)

Doctoral school: EDSE of Grenoble Alpes University

Starting date: September 2023

Topic description:

Climate change raises questions about both consumer and corporate behavior and calls for major efforts on the part of companies to reduce greenhouse gas emissions, both in terms of research and development and investment in low-carbon technologies, a possible reorientation by the latter towards the production of less polluting goods or activities, and more moderate purchasing behavior. Ecological planning, by coordinating environmental policy, industrial policy, public orders, and public enterprise strategies, aims to enable a transition to a more decarbonized economy. This project will focus on the design and implementation of ecological planning.

In order to design ecological planning, it is essential to have a global approach considering the different externalities between sectors (pollution, research and development, production factor, ...), the interactions between implemented policies, the presence of different market failures, the consideration of maturity and the risk of non-development associated with emerging technologies as well as the different behavioral biases. The study of the value chain in many sectors is essential to understand how to reorganize it and how to replace it with another or make it less polluting. The choice of regulatory instruments and the level of severity set depend on the coordination chosen. Policy commitment and credibility are particularly important. This project also intends to identify the various obstacles to the implementation of such planning.

The theoretical work will be applied to various issues, such as the emergence of CO2 capture and recycling technologies, digital pollution regulation, and the decarbonization of shipping and industry. This project may take the form of either a three-year doctoral thesis or a two-year post-doctoral fellowship. It will be integrated into the multi-disciplinary DefiCO2 project and will benefit from numerous exchanges with the different disciplines involved.

Keywords: innovation; industrial policy; climate policy, environmental regulation instruments; contracts; capture technologies.

Profile required: Master's degree in economics, engineer with skills in economics or PhD in economics. Simulation and modeling skills are required. A strong interest in climate change issues is essential.

Application procedure

1. Pre-selection on file (deadline June 1st)

Candidates for thesis funding will be invited to send their CV, a letter of motivation, and their master thesis. Candidates for a post-doc, their thesis, the jury report, and publications. We encourage you to send your application as soon as possible. The deadline is June 1st.

2. Audition (mid-June)

Selected candidates will be invited to an audition.

3. Result of the selection (end of June)

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