

E4BEL

Equity, Environment, Energy, Economy: An investigation into the equity, efficiency and acceptability of carbon pricing in Belgium

DURATION
01/09/2022 – 01/12/2026

BUDGET
1 011 775 €

PROJECT DESCRIPTION

The E4BEL project is about putting equity at the forefront of the climate policy debate in Belgium. The path to net neutrality will entail a period of disruption as climate policies have a significant impact on society. Such policies, and carbon pricing, will affect different households' purchasing power through heterogenous effects on consumption prices and, through changes in labor demand, on wage inequality. These equity impacts, and their subjective perception, partly explain public resistance and political reluctance to implement ambitious reforms. The Gilets Jaunes movement and the persistent job-killing argument used by opponents of green tax reform highlight how distributional issues drive public debate as much as rising concerns about global warming.

Our project will advance this debate by charting preferences for individuals on carbon pricing options and by novel economic modelling of the direct and indirect distributional impacts of such policies, with a focus on the loss of purchasing power through increases in consumer prices, wage changes by skill and occupation and losses of job opportunities in carbon intensive sectors, so called "brown jobs". We will map the full medium-run labor market and distributional effects of a realistic climate tax shift and design policy packages that can generate maximum public and societal support.

More precisely, this should allow us to the following research questions:

- Does the equity-efficiency trade-off in carbon pricing hold when taking into account a wide range of effects, notably those on prices and wages?
- Can we expect significant transition costs of employment shifts between sectors?
- To what extent do labour market effects differ by skill, occupation, or tasks?
- Is there an equity-acceptability trade-off in carbon pricing, i.e. can a majority of voters be found while at the same time safeguarding equity concerns?
- Can standard economic measures explain opposition to climate tax shift options, or are other forces at play?
- Does providing information drawn from economic models' impact analysis alter preferences or acceptability?

To this end, we will setup an intense cross-fertilization between different strands in economic impact analysis and sociological surveys on public acceptability.

The economic impact modelling will link up a micro-simulation model, capturing labour supply and consumption choices by heterogenous households, with a computable general equilibrium (CGE) model of the Belgian economy. The microsimulation model will encompass a piecewise commodity demand and labour supply model. The CGE model will capture complex substitution patterns between labour types (skills or occupations) and energy prices in production, and ultimately wage inequality.

We will make use of Belgian and German data to provide empirical underpinnings of the forces at play. Both models will be hard-linked ensuring maximum consistency.

Two surveys will gauge public acceptability of climate tax shifts. A first one will test the public's attitude on carbon pricing in general terms. Based on its results, and in conjunction with the economic modelling team, a set of climate tax shift options will be defined. A second survey will then test the public's view on these options using indicators drawn from the economic impact analysis in its questionnaire. This interplay will result in a range of policy options scored by indicators on environmental and economic performance, equity and acceptability.



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Beyond that contribution we expect the following impacts. On the scientific level, by valorizing existing occupation data and seeking opportunities to improve our knowledge in this regard, we will push the task/occupation framework of inequality studies in Belgium. This effort should enhance our understanding of trends in wage inequality even beyond the narrow climate framework. The integration of a CGE and microsimulation model, in our view indispensable in analyzing tax policy, has been very scarce in Belgium. In this sense, we see our project as domestic capacity building.

In a society where climate and energy issues are likely to dominate public discourse with its inevitable polarization, this project can be useful in two ways. By providing solid data on distributive and economic effects, we dispel myths and ensure debates remain anchored in facts. Our iterative interdisciplinary approach will provide policymakers with a more holistic approach, which will be useful when traditionally prescribed compensation mechanisms may not work.

Public services will benefit from our work, too. We will identify which sectors and occupations stand to lose from climate policies, and so provide labour market institutions with clues to where to focus their policies. Statistical agencies should benefit from our exploring the potential of Belgian and German labour market data.

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LINKS