Reconciling environmental and social goals in the transition towards a low-carbon society

Both at the Belgian and European level, the transition to a low-carbon society is considered an important policy concern. In this project, we start from the framework of sustainable development for contributing to the debate about how the transition to a low-carbon society can be achieved, while reconciling environmental and social goals. As has been documented for other countries, standard policy instruments often create trade-offs between the different goals of sustainable development. Addressing these trade-offs – as well as their translation into inequalities between socio-economic groups – requires a thorough understanding of the link between incomes, consumption and greenhouse gas emissions at the household level. Therefore, in this project we explore the interdependencies and inequalities operating at the micro-level and investigate how policy can reconcile social and environmental goals in the transition towards a low-carbon society.

More in particular, we will seek an answer to the following questions:

- How can the apparent trade-off between environmental objectives and objectives of distributive justice be understood with respect to low-carbon policies?
- What mechanisms are at play that explain how household actors are affected differently by low carbon policies, generating socio-environmental inequalities?
- Under what conditions do conflicts between competing policy goals emerge, and under what conditions can distributive and low carbon objectives be reconciled?
- What “high potential” policy packages can be identified that could succeed in reconciling social and environmental objectives, and what would their impacts on inequality, consumption and greenhouse gas emissions be if implemented in Belgium?
- What are the governance mechanisms at play when looking at low carbon policies and what could Belgium learn in terms of governance from other countries?

In order to answer these questions, we will:

1. Refine the role of the household actor in theories of transition and explain the implications for low-carbon policy instruments;
2. Construct a database that combines information on incomes, consumption and the environmental impact of consumption at the household level in Belgium, and map the interrelationships between these factors as well as the current governance context of low-carbon policies in Belgium;
3. Adapt and refine existing microsimulation models to run on this new dataset, thereby enabling the joint estimation of the distributive and ecological impacts of low-carbon policies;
4. Study policy packages that combine social and environmental goals in other European countries and analyse their governance context;
5. Evaluate the distributive and environmental impacts of selected policy packages if they would be implemented in Belgium, on the basis of the developed databases and simulation models;
6. Contribute to the development of a new policy paradigm, which allows for an integrative understanding of sustainable development and the multi-dimensionality of socio-environmental inequalities.
With this project, we aim at making a significant contribution to the scientific literature while at the same time moving the policy debate in Belgium forward. Conceptually, the research is situated in the social-environmental interface of sustainable development, an area that still remains a relatively uncharted terrain, certainly in respect to empirically-grounded explorations. In absence of a widely accepted analytical framework, the project delves into diverse strands of literature for conceptualising socio-environmental inequalities, the household as a central actor in the transition to a low-carbon society, and the implications for the low carbon transition policy paradigm used to shape the pathway of the transition.

Methodologically, an important innovation lies in the construction of the dataset and microsimulation model that connect social and environmental variables while remaining entirely grounded at the micro-level of the individual household. The novel empirical contribution therefore is a combined assessment of social and environmental policy rules, variables and outcomes, on the basis of a representative sample of households, taking account of the diversity and heterogeneity in the population (in contrast to median or average representative consumer models). This allows for capturing differential attributes and outcomes across the population and improving the understanding of the distributive mechanisms and effects, which generate or strengthen socio-environmental inequalities between households. By doing so, we will add the socio-economic dimension to the evaluation of different pathways of low-carbon transitions. This statistical capacity building exercise can inform evidence-based policies that focus on the consumption patterns of households and their environmental impact.

The dialogue with policymakers is taken up throughout the research project, aiming to inform societal actors and participate in the public debate. Scientifically, the research project is potentially a catalyst for an internationally emerging research domain and will contribute to the refinement of the research agenda in this area.

This proposal is submitted by a multi-disciplinary team consisting of sociologists, economists and social policy experts which bring strongly complementary sets of expertise to the project and all have a track record of high quality research.