



# Report on the stakeholder workshop on climate policies and just transition

on 16 June 2022 in Paris

organised by the EU H2020 project NAVIGATE and the JPI AXIS project CHIPS

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### Aim of the workshop

Over the next decades, societies will be subject to large transformations related to climate change mitigation policies. These transformations will have differential effects in different locations as well as in different societal groups, with the poor likely to experience the worst consequences. In turn, this raises issues of the societal acceptability of mitigation policies and of the possibility of compensation of transformation costs through transfers.

The workshop aimed at presenting research results on the distributive impacts of mitigation policies in the context of human development at different levels of global warming and along different socioeconomic pathways. However, increasing capture of spatial and social heterogeneity in a rich scenario space also increases the complexity of research results and consequently the hurdle for their use by stakeholders. The workshop fostered exchanges with stakeholders to ensure transparency, usability and applicability of research outcomes.

The objective of the workshop was to present results from the NAVIGATE and CHIPS projects pertaining to the impact of climate mitigation policies on inequality, poverty and other Sustainable Development Goals (SDGs). The workshop also aimed at establishing a dialogue with stakeholders on how to convey and disseminate research results on those issues. Identifying relevant aspects of mitigation policies and their impact is a key question in this dialogue. Because the two projects are in their last part, the focus was on how to make results salient and relevant, and how to disseminate to have a useful impact.

Furthermore, co-organizing the workshop between the two projects NAVIGATE and CHIPS aimed at exploiting the synergies and complementarities and the approaches taken in both projects and discuss and compare preliminary results from both.

### Program of the workshop

9:30-9:45 Welcome and introduction (Stéphane Zuber, Franziska Piontek, Céline Guivarch)

**Objective of the morning:** present preliminary results from the projects, discuss them and gather feedback and questions.

9:45-11:00 Session 1: Mitigation policies: inequality and acceptability (CHIPS) (Chair: Aurélie Méjean)

Jens Ewald (U. Gothenburg), "Understanding the resistance to carbon taxes" Marie Young Brun (CNRS, CES, CIRED), "Political economy of carbon taxes" Stellio Del Campo (MCC), "Inequality aversion for climate policy" Jose Labeaga (UNED), "Implications of carbon taxation on inequality and poverty in Mexico" Nicolas Taconet (PIK), "Evolution of within-region inequalities in low-carbon mitigation pathways: Insights from REMIND"

### 11:00-11:30 Coffee break

11:30-12:30 Session 2: Distributive effects of mitigation policies (NAVIGATE) (Chair: Franziska Piontek) Johannes Emmerling (CMCC), "Inequality - the incidence of climate change and policies" Simon Feindt (TU Berlin, MCC), "The impact of EU carbon pricing on households - analysis of distributional consequences between and within countries"

**Panagiotis Fragkos** (E3Modelling), "Assessing the distributional impacts of ambitious EU climate policies and measures to enhance equality"

**Bjoern Soergel** (PIK), "A sustainable development pathway for climate action within the UN 2030 Agenda"

#### 12:30-14:00 Lunch

<u>Objective of the afternoon</u>: discuss the use of the results for stakeholders, policy implications, and ways to communicate and disseminate the results to best serve stakeholders' needs.

14:00-15:00 Group work "Policy relevant results on distributional issues" (Chair: Céline Guivarch)

Focus groups structured around a set of questions to reflect on the implications of the results from the projects, the potential avenues to communicate the results and disseminate them.

15:00-15:15 Report back

15:15-15:30 Coffee break

15:30-16:45 Panel and general discussion (Chair: Stéphane Zuber)

Panel: Antoine Godin (AFD), Félix Mailleux (European Trade Union Confederation), Quentin Parrinello (Oxfam), Brian Walsh (World Bank)

16:45-17:00 Conclusion (Céline Guivarch, Stéphane Zuber)

19:15 Social dinner

### Participants

While 26 persons attended the workshop in person in Paris, 18 participants joined virtually. Apart from representatives of the NAVIGATE and CHIPS projects, stakeholders from various organisations like the World Bank, OECD, OXFAM, Swissaid, the European Trade Union Confederation and the French Development Agency participated in the workshop.

# Questions and feedback on the main results and preliminary analyses presented

*Question on presentation by Nicolas Taconet (PIK):* Which climate policies have you included in your model? How are household classes differentiated?

As policies, a carbon price that varies between regions, which is then converted to a global uniform carbon price. Several values of carbon price are tested. There is also revenue recycling with either equal lump-sums and sums proportional to income. Households are differentiated by income. Log-normal distribution projections on household income are made.

*Question:* As inequality is multidimensional, is access to services considered in your IAMs and CGE models? How would your results change if considering it?

Multidimensional inequality can be captured with multidimensional poverty indices. One could move policy variables and analyze how these indices are affected. However, once certain thresholds of access are attained, income is anyway the most influencing factor for the majority of parameters included in multidimensional poverty indexes. It is difficult to find people who are poor and not energy poor, or vice versa.

*Question:* Is there a way to measure demand elasticity for rural vs urban consumers? One can obtain data from registers in petrol stations, which are located in either rural or urban areas.

*Comment:* For communication purposes and in certain cases, acceptability of climate policy could be referred to as desirability of climate policy. Moreover, although policy fairness is often measured from the monetary side, it is also perceived in many other ways. For instance, a policy can be perceived as unfair if only induces behavior change to a specific group of people while others' is left unaltered.

*In response to this comment, an addition:* In the Swedish case fairness is the central issue of debate and it is conceived as "at least making rich people pay the same price".

*Question:* Acceptability of climate policy depends on distributional aspects but also governance. One way to increase acceptability is to make concerned and affected citizens part of the debate. Are governance aspects included in your models?

Not yet

Question on presentation by Simon Feindt (MCC): As per your methods used when measuring the impact of EU's ETS on households, are you assuming that demand stays static? Highincome households are more likely to be able to invest in low-carbon technology and thus reduce their consumption, is that considered?

In the input-output model we use, demand is static as the goal is to capture shortterm impacts. That is when households don't have time to react or simply they don't foresee the impact itself. However, some price elasticities are included in the analysis.

*Question on presentation by Bjoern Soergel (PIK*): Are externalities included in your model? Though not explicitly shown, they are included in the trades between regions for the large number of goods represented.

*Question regarding Bjoern Soergel (PIK) and Panagiotis Fragkos (E3Modelling) models:* Could you elaborate on your model structure? How do you represent the industrial sector? Do you consider material flows?

For E3Modelling: As per the model structure, it is a soft link between a CGE model and a micro-model involving an iterative process that converges fast, as opposed to what would happen with a hard link. Several production sectors are included and changes in income structure, international competitiveness, etc. are considered. For the moment only economic and not material flows are taken into account in CGE models, although it is one of the key steps that are to come.

*For PIK:* Regarding material extraction and flows, there is some level of representation in the agriculture sector through some indicators. For energy and industry, they are still not considered. Overall, there are no implicit material need quantifications. However, in general, as Sustainable Development scenarios have ambitious energy demand reductions, that also decreases material needs.

### Output from the group work on policy relevant results on distributional issues

The two group discussions led to the following outcomes:

### On insights and messages

- The key messages from preliminary results seem to be:
  - Though necessary, mitigation action will also have negative associated impacts. The central issue is how benefits and adverse effects are to be distributed.
  - In broad terms carbon taxes are regressive and, although revenue recycling can add some degree of progressiveness, there are no perfect compensation schemes as impacts are largely heterogeneous. However, some equity can be achieved.
  - $\circ$  Mobility seems to be the biggest sector to tackle, especially in developing economies.

### On further research needs

- The result that climate policies at all scales can be regressive, but that carefully crafted policies (in particular with targeted monetary transfers) can counteract this regressively is well-established in the academic literature and accepted by policy makers. There is still a need to communicate on that result to a broadening audience, but there is also a need to go beyond it. Suggestions in that direction are: (i) to explore other policy instruments than carbon pricing (eg regulations, bans, subsidies, credits, etc) and policy packages with several overlapping instruments; (ii) to explore other possibilities to compensate for regressivity (eg green spending); (iii) pursue new ideas about how to finance transfers for climate action, beyond a carbon tax (eg capital taxes), and quantify their implications ; and (iv) to be more precise on how to craft policies, including on the details of practical implementation (eg how to organize the transfers, how to target and channel transfers in practice...).
- Even with revenue recycling, carbon taxes are largely unpopular. For this reason, research should also focus on alternative/complementing sets of policy measures.
- For fairness and thus social acceptance, differentiation between what is essential and what is superficial should be included in carbon tax designs.
- More research is needed on climate and policy impacts across industry sectors and the labor force according to skills.
- Policy implementation strategies should further be explored, in particular the timing
  of different policy interventions. For instance, for social acceptance, it is crucial to
  have low-carbon alternatives in place prior to carbon pricing. Those should come in
  the form of public infrastructure and services. A strong systemic approach has to
  complement individual efforts.

- Hard feasibility constraints should also be taken into consideration in whole-economy models. For instance, material trade constraints and ex-ante social and political contexts. These can limit policy implementation to a big extent.
- The income inequality is more researched than other dimensions of inequality. Further research exploring multi-dimensional inequality, including for instance along age, residential location, household composition, gender, education, etc. would be useful. In that respect, pushing as much as possible for multi-dimensional indicators for analyses and results presentations is important. Making explicit where there are tensions between objectives and needs for arbitrage in policy decisions.
- Most modelling tools and scenarios presented do not include impacts from climate change. But impacts themselves have strong effects on inequality. It is important to communicate very clearly this limitation. Finding ways to present results such that this exclusion of impacts is well-understood is crucial.
- The issue of perceived fairness and justice of policies is important for policy-makers. Specific emphasis on this aspect would be useful.
- Further efforts and focus are needed on the Global South as research often falls in a very Eurocentric debate. However, are we entitled? Research on the Global South also involves certain challenges, as capturing its macroeconomic constraints in terms of trade, financing, etc.
- A global vision is important but it hides detailed insights. Research needs to keep combining global and regionalized analysis, as well as explain the existence of transboundary damages and interactions.

### On communicating research results

- Simulators are a good interactive tool to show how impacts affect individuals. However, they are often too complex and end up unused by the general public. Short policy brief giving the main messages in a few pages, with maybe one simple Figure/Graph/Map that would grasp attention, are often more used. Methodological explanation should be kept to their minimum, but crafted carefully to avoid misinterpretation or misuse of results.
- Short executive summaries of results in simple language is the best way to disseminate results. For EU-level policy makers, targeting influential media that advisors read is important (eg Politico, Euractiv, ENDS Europe). Media such as The Conversation may also be considered to address topics broader than a single academic article.
- Timing is important to be policy relevant. It is crucial for stakeholders to get insights and results from research when the topic appears in the policy debate, and not just when academic papers are published. Communication of insights from research should as much as possible be synchronized with the topics in the policy debate. This aspect can be difficult because the academic publication process is long and uncertain.

Ways to circumvent this difficulty could be to consider the two following complementary strategies: (i) if a topic appears in the policy debate before research is finalized: organize workshop or informal exchanges with stakeholders and policy makers to share preliminary results, (ii) if a topic appears in the policy debate "long" after an article is published, it might be useful to communicate at distance of the publication again if the result is relevant to the policy debate.

• However, research outside the policy agenda is also needed to unfold new issues and possible solutions.

### Output from the panel and general discussions

The main points that arose from the panel discussion are:

- Before shocks and negative impacts occur, it is important to have vulnerable households/individuals already identified. With this information, a fast and equitable reaction to unpredictable shocks is already possible. Research can help identify vulnerable groups.
- There is utility in combining micro and macroeconomic dynamics and overall having many methods to tackle the same questions, as each can offer valuable insights. However, completeness and complexity of models come at certain costs, such as getting answers long after needed.
- Inequality can come as a result of climate change impacts but also of mitigation policy. It can be manifested across regions and societal groups. In the EU, although the Just Transition and Social Climate funds are set to tackle these inequalities, they might be insufficient. Research into how those funds could work and could be complemented will be useful.
- A shift from labor taxation to environmental taxation is observed. It is argued that it is not the role of carbon taxes to raise revenues for the state. Labor and capital taxation can be much more effective in doing that, and often more progressive depending on their design. Also, capital taxation and even financial transaction packs can be used to fairly finance low-carbon transitions. Broadening research focus, beyond carbon taxation only, would be useful.
- More political tools to make low-carbon transitions possible are needed, as well as
  policies complementing green taxation. Pressure on damaging consumption patterns
  has to be complemented at the same time by policies ensuring access to low-carbon
  alternatives, otherwise negative impacts are accentuated. Moreover, carbon taxes
  should differentiate between essential consumption to cover basic needs and
  superficial consumption. Research exploring how policies can effectively target "overconsumption" and the highest emitters without hurting vulnerable groups will be
  important.