

Gregor Schwerhoff, Thang Dao Nguyen, Ottmar Edenhofer, Gianluca Grimalda, Michael Jakob, David Klenert, and Jan Siegmeier (2017). Policy options for a socially balanced climate policy. Economics Discussion Papers, No 2017-34, Kiel Institute for the World Economy. <http://www.economics-ejournal.org/economics/discussionpapers/2017-34>

**Response to referee report, June 16, 2017 - 10:29**

- **Very relevant theme**

- **The paper covers a wide array of relevant policy options. To what extent these options are merely theoretical considerations and to what extent they have been tested/implemented - and with which results - remains unclear in many instances. It would be important to expand on this in a longer version of the paper.**

In our understanding, your comment applies mostly to the last two paragraphs in proposal 3. We have added explanations to highlight which policies have been implemented and which reflect new ideas.

- **The key practical findings – in the sense of “implementable solutions for the G20” – of this paper should be highlighted better. For instance, the abstract merely says that “climate policies... can be designed.... in a way... and results in...”. This leaves one guessing of what in concrete terms should be done. One would wish here for a sentence or two of how they can be designed and to what extent this builds on extant evidence of relevant measures, how they these measures can be replicated/scaled up etc, and specifically, what G20 should do that countries or other entities cannot do by themselves.**

We formulated the recommendations carefully in order not to sound policy prescriptive. We added a new paragraph right at the beginning (after the heading “Proposals”) to explain our approach. Following your suggestion to be more specific we formulated the recommendations more concretely and listed them in the introduction.

- **In the “Proposals” section, too, the key messages as highlighted (bold, underscored) tend to be statements that are (academic) findings rather than (policy) recommendations. It might help to simply change the wording here (e.g. “should” instead of “can”) to carry the message more strongly.**

Indeed, it was our intention to use the bold sub-headings to give scientific information that backs up the respective main recommendation – see also our previous answer, and the related new paragraph in the document.

- **There is a wealth of concrete options / (potentially?) implementable solutions in the paper, but they would benefit much from being highlighted more strongly. A table, overview, clearer categorization etc would help here. Also, as mentioned above it remains often unclear whether they are merely theoretical considerations or practical cases.**

The main aim of our policy brief is to provide a concise summary of what recent academic literature tells us about distributional implications of climate policy, and in particular carbon pricing. We agree that a more profound analysis would be worthwhile. However, due to the limited length available, we are forced to restrict our discussion on providing some examples how regressive impacts of climate measures can be avoided, for instance by targeted revenue recycling. In this context, we review theoretical considerations and briefly draw on the experiences in Switzerland and British Columbia. We agree that the distinction between theoretical considerations and examples had not been sufficiently clear. We have restructured proposal 3 accordingly to achieve a clearer separation.

- **The final section (5) addresses the probably crucial point: most experts and policy makers would agree that fossil fuel subsidies are bad and carbon pricing is good and that climate policies can be designed in a socially balanced way; but the political economy question of how – if it at all – reforms can be implemented is the real challenge. One would have wished far more emphasis on this in this paper and a more practical key messages than the obvious “need to be designed in a way to overcome political resistance” – even though there are some examples in the text of what specifically could be done / has been done. So again – a question of presentation / wording / highlighting.**

We do think that a genuine concern for the distributional effect of climate policy is a crucial point for climate policy. It is thus important to point out that there is no tragic trade-off between sustainability and equality. Nevertheless, we agree that political economy is crucial as well. We took up your suggestion and formulated recommendation 5 in a constructive and concrete way. We also extended section 5 by the aspect of stakeholder involvement:

“The effect of climate policy on the wealth distribution, but also a “behavioral momentum” (Gifford 2011) standing in the way of reducing the carbon intensity of consumption and other effects can cause strong resistance against such a policy even though it would be beneficial for aggregate welfare. Stakeholder involvement has been identified as a promising approach to “diminish the veto power of various societal actors” (Edelenbos and Klijn 2005). By now a broad range of experiences is available and has produced important insights on the best approaches and methods (Welp et al. 2006; Hage, Leroy, and Petersen 2010; Bäckstrand et al. 2010; Luyet et al. 2012). In some cases participatory approaches have caused a “participation fatigue” (Wesselink et al. 2011). To avoid this effect and to make participatory approaches successful, (Reed 2008) recommends eight features of best practice, including the formulation of clear objectives and the need for highly skilled facilitation.”

- **There are still some typos, duplication of words.**

We have revised the text and eliminated several typos and duplications.

Invited reader comment, June 19, 2017 - 08:34

**This is a short paper that discusses how climate policy, in particular carbon pricing and the removal of fossil fuel subsidies, can be designed in a socially balanced way, or accompanied by other policies to achieve that goal. In doing so, the paper also summarizes relevant literature and briefly explains how different countries have already addressed this issue quite successfully.**

**In my opinion, this is a relevant contribution for a wider audience, including policy makers and other stakeholders. It clarifies that climate policy may well be designed in a fair way, with progressive rather than regressive effects in terms of income. Although the arguments provided are not radically new, the paper summarizes the most relevant insights in a clear and concise way. It is worth mentioning that the paper also addresses some of the main political obstacles to a successful implementation of carbon pricing or fossil fuel subsidy removal. This is especially important, given that the policy instrument of carbon taxation or carbon pricing more generally is well understood and highly recommended by many economists, while it is still not implemented on a sufficient scale to have a serious impact on global carbon emissions.**

Thank you for your appreciation. You mention that the arguments are not radically new. We have intentionally chosen to review existing and reviewed research. In our view completely new ideas require a detailed explanation and should be tested empirically or at least modeled theoretically. The authors have contributed new ideas to the debate. These ideas have been published recently and are cited in this article. This article was intended to be limited in length, yet broad in topic.