



Increasing the public acceptability of consumption-related regulations in climate and environmental policy

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Push measures including regulations are part of effective instrument mixes in climate and environmental policy. However, taxes and regulations that target people's everyday behaviour and consumption often meet with public rejection. This Policy Brief reveals how consumption-related regulations can be made more acceptable by addressing aspects of policy design, implementation, process, and strategy. It is based on a focused review of research literature.

Key recommendations

- Embedding a consumption-related regulation within a broader policy package (including supportive and production-related measures), can increase its acceptability.
- The same holds true for granting some flexibility and fair exemptions in implementation.
- This also applies to temporally limited trial runs or gradual implementations over time, eventually combined with interim evaluations.
- Building broad actor coalitions and integrating citizens in decision-making processes also have the potential to increase public support.

Introduction

The mitigation of climate change and other environmental problems requires a mix of ambitious policy measures that address different sectors, consumption areas and target groups. The so far limited success of climate policy in particular indicates a need for further action with regard to creating effective and coherent policy mixes, addressing both production and consumption, combining support of green innovations with phase-out of unsustainable artefacts, and smartly combining different types of policy instruments, from rather soft pull measures to more demanding push measures. Push measures include pricing instruments as well as regulatory measures like rules, standards and bans (also called “command-and-control instruments” or “regulatory law”, in the following “regulation” or “regulatory measures”).

Media coverage as well as research studies show that pull measures usually meet with higher public acceptability¹ than push measures, especially when they target consumers rather than producers (e.g., Groot & Schuitema 2012; Kantanbacher et al. 2018; Wicki et al. 2019). Push measures who require efforts or behaviour changes in consumers’ everyday life are particularly unpopular compared to technological requirements in consumption choices (Bothner et al. 2019; Groot & Schuitema 2012).

Much research has been carried out not only on the acceptability of different environmental policy instruments but also on the influence of (relatively stable) country- and personality-specific factors, including individual beliefs and perceptions, on support levels (see the literature reviews by Drews & van den Bergh 2016, and by Ejelöv & Nilsson 2020). There has been much less research on politically influenceable factors like concrete policy design and implementation, especially regarding regulatory measures (there is more on price instruments like CO₂ taxes and their revenue recycling). This is highly regrettable from a political action perspective.

Based on a review of international research literature as well as own case studies within the PARC research project², this Policy Brief presents the resulting policy recommendations for increasing the acceptability of consumption-related³ regulatory policy proposals in the future.⁴ Specific Policy Briefs have already been published (in German) on the PARC case-study issues, i.e., legal requirements for the use of renewable energies (RES) for heat generation in buildings (Braungardt & Degen 2021), and restrictions of urban car traffic (Blanck & Jakob 2021).

¹ Acceptability is defined here as an affirmative attitude toward a policy proposal before its implementation. Positive attitudes may, but do not necessarily, lead to active support.

² “Public acceptability and political feasibility of regulating consumption” (PARC), running from December 2020 to June 2021 (cf. Heyen et al. 2021 for detailed results in German).

³ Means here behaviour-related, or product-related if restricting consumption options.

⁴ It must be pointed out that there has been only limited research so far on politically influenceable factors on the acceptability of consumption-related regulations. Many findings must be validated in further research. Moreover, due to the focus of most studies on specific acceptability factors, we ultimately still know very little about their *relative* importance (Drews & van den Bergh 2016; Ejelöv & Nilsson 2020). While the PARC case studies looked at a large range of factors (in particular politically influenceable ones), they faced the difficulty that the different factors could be examined ex-post with varying robustness.

Recommendations on policy design and implementation

Studies indicate that consumption-related **push measures meet with greater acceptability if they are combined with soft, supportive measures** like information or subsidies in policy packages. By doing so, personally felt consequences, which are important for people's acceptability judgments (cf. Drews & van den Bergh 2016; Ejelöv & Nilsson 2020) will presumably be assessed more positively. In the transport sector, for example, it has been proven that an expansion of and price reductions in public transport increase the acceptability of car traffic restrictions (Fesenfeld 2020b; Pfeiffer et al. 2021; Wicki et al. 2019). In the case of the RES-heating regulations in Baden-Wuerttemberg, users rated the financial support for implementing measures as particularly positive (Degen & Braungardt 2021). Information campaigns and free advisory services can also have a positive impact on public support (ibid.; Pfeiffer et al. 2021; Wicki et al. 2020). Thus, if not already introduced in advance, measures that make the politically desired behaviour or technology financially attractive and/or easy to implement should be introduced in parallel, at the latest. Policymakers should particularly emphasize the beneficial policy elements (Fesenfeld 2020a).

Stricter requirements for production processes and products as part of a policy package can also increase public acceptability of consumption-related regulations, probably because people feel that they do not bear the sole burden in environmental protection. For example, strict environmental and animal welfare standards on the production side increased the acceptability of entire policy packages including consumption-side policy instruments for sustainable nutrition (Fesenfeld 2020b).

Moreover, **choice options and exemption clauses can increase a measure's acceptability**. While being under-researched so far, the PARC case studies found some evidence for this factor: Stakeholders and citizens positively assessed that the regulations on renewable heating energy provide for multiple technology options, substitute measures, and exemptions in the case of technically impossible implementation or economically unreasonable burdens (Degen & Braungardt 2021). The measures for car-reduced zones provide exemptions for, e.g., people with disabilities or local businesspeople (Pfeiffer et al. 2021). Given the importance of fairness perceptions for acceptability assessments (cf. Bergquist et al. 2021), **exemptions should be designed in such a way that most people regard them as fair**.

Some studies conclude that **introducing a measure initially for a limited period of time ("trial run") has a positive effect on acceptability**. Wicki et al. (2020) show in survey results on transport measures in Switzerland that even the announcement of a trial run with subsequent evaluation increases the acceptability of policy packages. The (non-regulatory) example of a congestion charge in Stockholm shows what a trial run can achieve. Public support in polls increased by 18 % during the trial, and in the subsequent referendum a majority voted in favour of the measure (Schuitema et al. 2010). Moreover, trial runs, which can also be spatially limited, have the potential to improve the design of a measure through policy learning (see, e.g., Bauknecht et al. (2021) on policy experiments). However, a trial run only makes sense in the case of behaviour-related measures whose implementation cannot be avoided (e.g., in the case of car-reduced districts). In the case of measures that require private investments (e.g., regulations on heating technology), trials without financial incentives make little sense, as their implementation can be avoided by delaying investments.

As an alternative to trial runs, a **gradual implementation** – or “policy sequencing” (Pahle et al. 2018) – **with an increasing “stringency over time” (ibid.) could also ensure greater acceptability**. Such a tightening of instruments over time occurs regularly in practice, especially in the case of push measures: from CO₂ taxes and emissions trading to regulatory measures such as the phase-out of light bulbs (Stegmaier et al. 2014) or those from the PARC case studies. It is also standard in cases of terminating (dismantling) public policies or organisations (Bauer et al. 2012; Heyen et al. 2017; Pal & Weaver 2003). However, the exact acceptability effect of such sequencing has hardly been empirically investigated.

Recommendations on strategic and procedural aspects

Beyond policy design and implementation, it seems advisable, especially in the case of push measures, to strategically prepare, time and communicate policy proposals.

Environmental policy measures are more likely to be accepted if there is a **high level of public problem awareness and knowledge** (Bergquist et al. 2021; Drews & van den Bergh 2016). As far as possible, policy actors should therefore try to contribute to such awareness and knowledge. Moreover, there is often a higher level of problem awareness and higher acceptability of countermeasures within windows of opportunities, for example, in cases of disasters (Alló & Loureiro 2014; Owen et al. 2012). The media analysis in the PARC case study on Hamburg’s RES-heating regulation suggests that the high issue salience of climate change in the wake of Fridays-for-Future demonstrations 2019 has promoted positive media coverage and public acceptability of the measure (Degen & Braungardt 2021).

The acceptability of a measure also depends on the expected effectiveness and perceived fairness (Bergquist et al. 2021; Drews & van den Bergh 2016; Ejelöv & Nilsson 2020). It therefore seems advisable to **commission robust impact assessments at an early stage**. These can lead to an improvement of the proposed measures, and they can help to inform the public debate and possibly refute inaccurate claims made by opposing actors. As already indicated in the context of trial runs, but not limited to those, there is also evidence that the **announcement and the real execution of transparent and independent monitoring or of an interim evaluation** can have a positive effect on the public support for the introduction, continuation or tightening of a measure (Fesenfeld et al. 2022; Heyen et al. 2021; Wicki et al. 2020).

Furthermore, the **results of representative surveys should also be actively communicated if they show that the majority of people supports the measure**. Studies on pricing instruments have shown that people are more likely to find a measure acceptable if they think (or are informed) that the measure is supported by a majority (Bolsen et al. 2013; Groot & Schuitema 2012). Representative surveys are also important because political actors perceive public preferences often selectively or biased (Broockman & Skovron 2018; Hertel-Fernandez et al. 2019).

Moreover, when it comes to contentious issues, people often base their opinions on the positions of (organised) actors whom they trust and with whom they share a common worldview (DeCaro et al. 2017; Glynn et al. 2018). Analyses of Swiss referendums on environmental policy proposals show that their success depends on the extent to which political parties and associations expressed their support (Pleger 2019; Stadelmann-Steffen 2011). The attitude of advising craftspeople and chimney sweeps

to the EE-heating obligations in Baden-Wuerttemberg had a high influence on the measure's acceptance by the citizens concerned (Heyen et al. 2021). Thus, it seems recommendable to **build a broad actor coalition**, which is facilitated by emphasising the co-benefits of climate and environmental policy. In addition, **stakeholders important for the implementation of the measures should be involved**. In Baden-Wuerttemberg, for example, information events and workshops were offered for craftspeople and chimney sweeps (Degen & Braungardt 2021).

Finally, the **citizens themselves should be involved at an early stage and have real opportunities to exert influence**. Studies find at least slightly positive effects on public support through real-world participation processes in the context of local environmental policy (Newig et al. 2012; Ross et al. 2014), in the context of focus groups and deliberation groups (Lo et al. 2013; Stoll-Kleemann et al. 2001), and in the context of surveys and interviews on citizen assemblies (Kuntze & Fesenfeld 2021). In the PARC project cases of car-reduced zones in Ghent and Ottensen, there have been multiple participation formats ranging from information stands and surveys to workshops, focus groups and a "citizens' cabinet" that enabled the residents to have a say in the design of urban space. According to the actors involved, these formats have significantly increased public support (Pfeiffer et al. 2021).

Conclusions

Consumption-related regulations, which are often rather unpopular, can be made more acceptable by addressing issues of policy design, implementation, process, and strategy as discussed in this Policy Brief. Most of the recommendations are, in principle, also applicable beyond regulatory measures. When applying some of the recommendations, such as exemption clauses or a gradual implementation, possible negative consequences for a measure's effectiveness must be examined and weighed against the acceptance benefits.

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