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The Welfare State and its Role in the Socio-Ecological Transformation

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Summary

This article argues that the socio-ecological transformation does not only require to restructure the traditional welfare state architecture but also to renew welfare state objectives and institutions. While compensatory and preventive functions have long been in the foreground, it is now time to expand the transformative component and promote ecological sustainability through the welfare state. Conceptual starting points for the socio-ecological transformation are the core of this article.

Zusammenfassung

In diesem Artikel wird argumentiert, dass die sozial-ökologische Transformation nicht nur eine Umstrukturierung der traditionellen Wohlfahrtsstaatsarchitektur erfordert, sondern auch eine Erneuerung der wohlfahrtsstaatlichen Ziele und Institutionen. Während

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lange Zeit kompensatorische und präventive Funktionen im Vordergrund standen, gewinnt nun die Stärkung der transformativen Funktion und die Förderung der ökologischen Nachhaltigkeit durch den Wohlfahrtsstaat an Bedeutung. Der Artikel fokussiert auf konzeptionelle Ansatzpunkte für die sozial-ökologische Transformation.

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1. Path Dependency and New Challenges for the Welfare State

Looking back historically, the development of welfare state structures was, on the one hand, a response to pressing current issues and, on the other hand, also set the course for society. A series of measures related to working conditions (for example, the maximum daily working hours for factory workers) also actively shaped the social fabric of European countries. Following an expansion of welfare state benefits, predominantly of a compensatory nature, from the 1980s onwards policymakers set new goals for welfare state structures with the investment welfare state (van Kersbergen and Hemerijck, 2012). Enabling people to participate in the labour market and education policy, from early childhood education to lifelong learning, have become central fields of welfare state action (Taylor-Gooby, 2004; Hemerijck, 2023). Investment in human capital was understood as a basis for strengthening the economy and thus economic security.

This article argues that the socio-ecological transformation does not only require to restructure the traditional welfare state architecture but also to renew welfare state objectives and institutions. While compensatory and preventive functions have long been in the foreground, it is now time to expand the transformative component and promote ecological sustainability through the welfare state.

In the following we outline the necessity as well as the framework conditions for the welfare state to foster the socio-ecological transformation. This conceptual contribution begins with the building blocks and objectives of the eco-social welfare state (section 2), addresses the necessities of the socio-ecological transformation (section 3), and highlights the need for distributional considerations (section 4). Starting points for the social and ecological transition of the welfare state are outlined in section 5. The article concludes with considerations on the interactions between the various objectives and policy measures (section 6).

2. Comprehensive Welfare State Structure

The development of welfare states and their services are facilitated by economic growth, and social developments have a positive impact on economic

growth in turn. Welfare states and growth also influence each other negatively, since the extent to which growth and climate-damaging emissions have been decoupled is still limited, undermining, for instance, health outcomes (Haberl et al., 2020; Hirvilammi, 2020). Approaches to decouple welfare and growth are not the topic of this article (Koch, 2022; Büchs and Koch, 2017), which provides fundamental reflections on how to develop and transform welfare state structures in the direction of an eco-welfare state. The starting point is the fact that welfare states are key players in the transformation of social policy towards a 'sustainable welfare state' (Koch, 2022).

Social policy regulations encompass people's lives so comprehensively that it is difficult to define social policy as a separate policy area. However, in the face of increasingly pressing environmental problems and challenges, new tasks are arising for the welfare state: Following the historical evolution from a compensatory to a preventive to an investment focus, the transformative function of the welfare state is increasingly moving to the fore. This transformative function aims to not only support, but also accelerate the path to a low-resource and low-emission economic and social system that is also socially inclusive.

The volume of social protection expenditure – as a quantifiable part of social policy – in relation to GDP averaged about 30 % in the European Union (EU-27) in 2021; ranging from 15 % of GDP in Ireland to 38 % in France (Eurostat[1]). In addition, also laws and standards, such as working time regulations and minimum wages, also shape the social situation of the population and are therefore part of welfare state structures. Infrastructural conditions, in particular the range of services in the area of services of general interest, play a role as well. A prospering economy and society require a complex infrastructure and services such as energy supply systems, water supply, wastewater disposal, transport infrastructure, and telecommunication networks. Infrastructure for education, health and housing sectors provides important services of general interest which have a high priority worldwide (Spatafora, 2021).

Figure 1 illustrates the transition from a traditional to an ecologically sustainable welfare state. The need for structural changes in the areas of employment, health and long-term care, housing, mobility and family policy is partly derived from obligations arising from various climate policy regulations (Paris Climate Agreement (UNFCCC, 2015); European Green Deal (European Commission, 2019); European Climate Law (European Commission, 2021b), Effort Sharing Regulation (European Commission, 2023), "Fit for 55" package (European Commission, 2021a)).

[1] Eurostat, [spr_exp_sum__custom_12437386], retrieved on 1.8.2024.

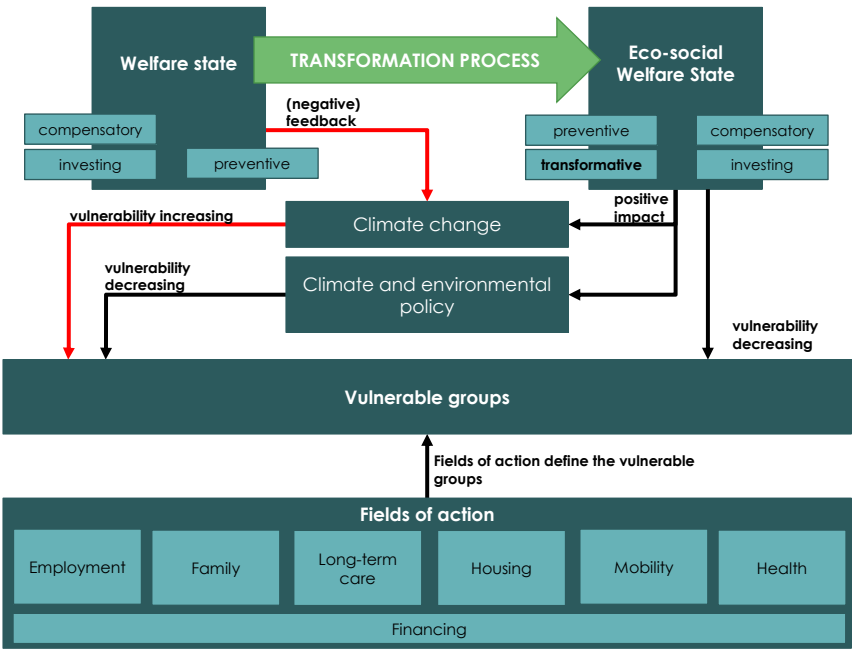

Figure 1: From a traditional to an ecologically sustainable welfare state

Source: Own elaboration.

The transformation of the traditional welfare state into an eco-social welfare state means targeted support for vulnerable groups in all fields of action. The transformation requires measures to reduce the number of vulnerable people. At the same time, support measures for these groups need to be expanded during the transformation and adaptation process. In the medium and long term, education, labour market and economic policies etc. play a key role in determining the vulnerability of the population. Steps towards an ecologically sustainable welfare state are therefore cross-cutting issues and do not fall exclusively within the remit of traditional social policy. In view of the complex interdependencies and uncertainties outlined above, in addition to specific measures, an integrative policy approach is increasingly needed, which allows new solutions and overcomes the silo mentality between environmental and social policy.

3. Background to the Socio-Ecological Transformation

Models used by Earth system science show that the stability of the planet's ecosystem and therefore the well-being of humanity are more and more endangered by human activity. For example, Richardson et al. (2023) show that the

defined planetary boundaries have currently been exceeded in six out of nine relevant system areas and that the stability of the Earth system is therefore very likely to be jeopardised[2]. The effects of exceeding these limits are already evident and visible in the form of global warming and reduced biodiversity.

As the safe are being passed, the risk of transgressing tipping points in some areas increases[3], which can lead to sudden and sometimes irreversible changes. This jeopardises livelihoods for many people and triggers migration flows (IPCC, 2018)[4]. There are major interdependencies between the stability and resilience of the Earth system and human well-being. Rockström et al. (2023) therefore suggest that human well-being should be given greater consideration when recording impacts of climate changes: The loss of livelihood or income, loss of water or food security or occurrence of chronic diseases up to the loss of human life, i. e. human well-being[5] should be a central component in defining fair and safe Earth system boundaries. Regional differences in climate impacts must also receive more attention (Rockström et al., 2023).

Some of the ecological limits defined in recent decades have already been incorporated into international environmental policy, such as climate policy and the international climate target of reducing global warming to well below 2 °C or below 1.5 °C compared to the pre-industrial level (UNFCCC, 2015).

At EU level, the European Green Deal (European Commission, 2019) provides the basic framework for the green transition. With the European Green Deal, the EU member states set themselves the target of achieving climate neutrality by 2050. With the adoption of the European Climate Law (European Commission 2021b), this target became binding, with the interim target of reducing greenhouse gas emissions by at least 55 % by 2030 compared to 1990 levels. This target is split between the EU emissions trading system (ETS) for emission-intensive industries and the remaining areas of buildings, transportation, agriculture, waste management and less emission-intensive industries (non-ETS). The EU-wide target for the EU ETS is to reduce emissions by 62 % by 2030 compared to 2005. For the non-ETS sectors, the Effort Sharing Regulation

[2] Cf. www.pik-potsdam.de/de/aktuelles/nachrichten/schwindende-widerstandskraft-unseres-planeten-planetare-belastungsgrenzen-erstmals-vollstaendig-beschrieben-sechs-von-neun-bereits-ueberschritten-1 [30.08.2024].

[3] https://www.pik-potsdam.de/de/produkte/infothek/kippelemente/kippelemente.

[4] See also www.pik-potsdam.de/de/produkte/infothek/kippelemente/kippelemente [03.01.2024].

[5] In doing so, they combine UN sustainability goals, the doughnut economy and the previous concept of planetary boundaries. The concept of the doughnut economy (Raworth, 2017) as an economic theory is based on planetary and social boundaries within which there is a safe and fair space for humanity and a regeneratively distributing economy. The Amsterdam economic area adopted the doughnut economy in 2020 (see also doughnuteconomics.org/amsterdam-portrait.pdf [30.08.2023]).

(European Commission, 2023) sets national reduction targets for the individual member states by 2030 compared to 2005 emission levels.

In line with the goal of climate neutrality by 2050, the European Commission presented a comprehensive package of legislative proposals in July 2021 with the "Fit for 55" package (European Commission, 2021a). The aim is to reduce greenhouse gas emissions by 55% by 2030. This package provides for the amendment of existing energy and climate legislation, on the one hand, and the introduction of new legislation, on the other.[6] Most of the proposed EU directives and EU regulations have been adopted in the meantime (Kettner et al., 2023). The legislative package now provides the basis for the implementation by the member states.

Regardless of the political instrument, the limited timeframe until 2030 and the ambitious goal of reducing emissions and adapting to climate change pose considerable challenges for implementation, which also have a significant impact on the further development of the welfare state architecture. A paradigm shift is therefore required from sector- or area-specific (individual) measures to cross-sectoral approaches that also encompass all governmental levels.

4. Distribution of Impacts and Costs of Climate Change

Climate change and environmental damage have physical, psychological, social, economic and institutional effects (Fuchs and Thaler, 2018; Papathoma-Köhle and Fuchs, 2020), which are unevenly distributed both within and between countries.

- The *physical dimension* includes health risks from heatwaves and climate change in terms of the incidence of illness, but also the frequency of damage to infrastructure facilities such as buildings.
- The *social dimension* refers to the risk of particular social groups being harmed. Key vulnerability characteristics are income, level of education, migration background, family context, chronic illnesses, age and gender (Seebauer et al., 2021). Risks affecting individual groups of people overlap and reinforce each other. In addition to people with a low level of education, people with severe health conditions, single parents and people with a migration background, children and people over the age of 65 are particularly vulnerable (Seebauer et al., 2021). Moreover, almost all vulnerability characteristics apply more often to women than to men. These vulnerable groups are both directly affected by climate change and will be more severely impacted by climate protection measures indirectly, notably when they have a financial im-

[6] For an overview, see also Kettner and Feichtinger (2021).

pact, for example through rising product prices as a result of corrective taxes (Kirchner et al., 2019).

- The *economic dimension* relates to the direct and indirect costs of climate change (health impacts for the population, crop failures, damage to infrastructure, disruption of production or supply chains, international feedback loops, etc.), as well as the necessary investments for climate protection and adaptation to climate change.
- The *institutional dimension* encompasses the range of services offered by the public sector at all governmental levels in the area of public infrastructure and public services (services of general interest, mobility, health, etc.). Taxpayers are faced with new costs for the adaptation of services.
- Furthermore, climate impacts and changes also have a *psychological dimension*, which results directly from heat stress or exposure to extreme events (stressors as triggers for mental illnesses or their worsening). Indirect adverse effects include fear of loss and feelings of powerlessness in the face of climate change or its unevenly distributed effects. Policy measures that are perceived as unsatisfactory can lead to anger, disappointment and resignation (Carleton, 2017; Cianconi et al., 2020; Pörtner et al., 2022). Perceived or actual inequalities exacerbated by climate change and climate protection measures also harbour potential for conflict.

The costs and damage caused by environmental degradation and climate change are unevenly distributed. Those who contribute above average to environmental damage are less affected by these effects. Striking data from the World Inequality Database suggests that the per capita emissions of the top 1 % of the income distribution have increased since 1995, while those of the remaining 99 % have decreased. The per capita emissions of the top 1 % are more than 20 times higher than those of the lower half of the income distribution.[7]

The lower income groups are disproportionately affected by environmental degradation (poorer housing conditions, health, etc., including premature death). These intangible costs have a very significant impact on people's lives but cannot be comprehensively quantified in monetary terms. However, estimates show that the intangible costs in the health sector alone are significantly higher than the direct costs (Tompa et al., 2019; Leoni et al., 2020). Presumably for that reason, the costs of inaction in climate policy for the private and the public sector are still little recognised by the public and policymakers (Steininger et al., 2020).

[7] See also https://wid.world/country/germany/ (30.08.2024).

5. Starting Points for the Social and Ecological Transformation of the Welfare State

In the traditional approach, the welfare state regulates the conflicting goals between the production factors of capital and labour, while "natural resources" such as air and water or the time spent on unpaid care work are not directly addressed. The challenge for an "ecologically sustainable welfare state" now is to formulate new regulations for the old conflicts of interest, taking into account the previously ignored consumption of resources and overuse as well as climate change (Kromp-Kolb, 2023). While both compensatory and investment-based social policy leave the source of risk production largely unaffected, a preventive, but above all a transformative welfare state aims to change the conditions of production and consumption that are harmful to resources and the climate (Meinhart et al., 2022). Enforcing and supporting the transformation process thus represents a new task for the welfare state (Mandelli, 2023). At the same time, traditional objectives, i. e. compensatory and investment-related tasks, are gaining in importance, as climate change and environmental degradation cause high health, social and economic costs.

Ecological sustainability represents a new orientation in the alignment of institutional welfare state structures. It is about the structural consideration of the new social "climate risks"[8] in the welfare state architecture and the compensation of costs for vulnerable groups (Frondel et al., 2017). The transformation to an ecologically sustainable welfare state means a re-regulation of different goals and interests, some of which harmonise with each other, but some of which also involve classic conflicting objectives. These conflicting objectives must be taken into account and avoided when considering all relevant policy areas – transport policy, housing policy, infrastructure policy, etc. – together. An ecologically sustainable social policy must therefore be designed in such a way that both the social effects of climate change and climate policy are mitigated, and the climate-damaging effects of social policy are reduced.

The specific objectives and the desired shape of the socio-ecological transformation and future production and consumption conditions require an ongoing social and political discourse and negotiation process on a broad basis. The following fundamental scope for action and starting points in the existing welfare state should be addressed:

- social protection against new risks and impacts caused by climate change (e. g. strengthening and regulating private insurance coverage[9] and disaster protection),

[8] IPCC (2022) defines 127 main risks, i. e. risks that have potentially serious adverse consequences for people and socio-ecological systems.

[9] Sinabell and Url (2006).

- preventing the externalization of costs related to environmental and health damage,
- the socially balanced design of measures to combat climate change (compensation for cost increases for vulnerable groups, e. g. lump-sum transfers, enabling environmentally friendly heating and cooling for all, social energy advice),
- promoting the resilience of communities (e. g. by promoting preventive measures such as flood and heat protection, but also by promoting social cohesion through regional cooperation/project development, volunteering, community experience and regional supply and support structures),
- enabling and promoting environmentally friendly working and living (e. g. satisfying mobility, housing and consumption needs in an environmentally friendly way, in particular by providing affordable socio-ecological infrastructure without access barriers, e. g. public transport, local recreation facilities and energy supply, and expanding these to include a sufficient range of universal basic services), and
- the environmentally friendly design of the government social department's own institutions, measures, services and processes.

The existing institutions of the welfare state have a key role to play in achieving objectives with future measures. One difficulty will be to present the goals of the transformation in a transparent and comprehensible way. The trade-offs should also be made clear. Transparency will help to increase the acceptance of climate protection measures among the population (Menges and Traub, 2012). A further challenge lies in defining the benefits and costs of various measures, which can only be partially objectified or quantified. The spatial (regional/national/international) and temporal disparities in the costs and benefits of climate policy measures also make it difficult to weigh up the objectives and to make them visible (Menges and Traub, 2012). In addition, budget and fiscal policy must be more closely harmonised with the goals of an ecologically sustainable welfare state in the future in order to reduce potential conflicts of objectives.[10]

Certain areas of welfare state action have a direct impact on climate change, particularly through emissions from mobility, housing and healthcare. The socio-ecological transformation therefore requires measures to reduce emissions and the development of innovative solutions that enable behavioural change both in vulnerable groups and beyond. Financial support is also needed, for example for construction measures. Improved access to high-quality and ecologically sustainable public infrastructure, including care, healthcare, nursing and

[10] See Bock-Schappelwein et al. (2024) for details.

transportation, and its expansion in the direction of universal basic services also counteract both economic and regional inequalities (Heitzmann et al., 2024).

Furthermore, social and labour market policy instruments are required in order to mitigate the negative effects of the transformation process (rising unemployment due to the elimination of occupations with high greenhouse gas emissions, high material and water extraction and land use, etc.) (Schneider, 2023). At the same time, the transformation process will also open up additional employment options and new fields of employment, which will require new qualifications, retraining and reskilling. Their socially inclusive design is an important prerequisite for ensuring that all social groups can participate in the new employment opportunities. The area of education and training is therefore crucial not only for the acquisitionof green skills alongside sufficient basic skills, but also in order to promote a sustainable economic system that fosters ecologically sustainable production and services.

6. The Need for Comprehensive Action

The changing requirements for an ecologically sustainable welfare state are only slowly finding their way into academic literature and political discourse.[11] This has resulted in research gaps on the environmental impacts of social policy measures as well as on the resilience of social security systems to climate impacts (Bohnenberger, 2021; 2022). There are manifold interrelations between the welfare state and climate change in the most important fields of action of the welfare state.

On the one hand, the ecologically sustainable welfare state has the additional task of protecting citizens from the consequences of climate change, with special consideration for vulnerable groups (be it families and children, the elderly or specific groups of workers). It must also compensate for the negative social and financial consequences of climate protection and adaptation measures.

On the other hand, policy measures in the individual fields of action of the welfare state must be designed in a climate-conscious manner in order to reduce their carbon footprint. In this context, synergies between climate and socio-politically motivated measures should be exploited. For example, the reduction of greenhouse gas emissions has co-benefits for health policy and reduces spending in certain areas of social security (e. g. healthcare system or family policy) in the longer term (Schneider, 2023).

[11] See also European Commission, Directorate-General for Employment, Social Affairs and Inclusion (2023) or Schneider (2023). A list can also be found, for example, in Bohnenberger (2022).

The measures that can be taken in the course of transforming the traditional into an ecologically sustainable welfare state include all forms of state intervention, from regulations, subsidies, taxes and levies and infrastructure to awareness-raising (Feller et al., 2017, p. 460; Schneider, 2023). However, far-reaching transformations cannot be achieved through isolated measures in individual fields of action or by individual ministries and institutions alone. Rather it is essential to strengthen coordination and policy coherence. A cross-departmental and cross-level strategy for implementing a socio-ecological transformation is as indispensable as institutionalised cooperation between central ministries (Seebauer et al., 2021), in particular the social, climate and finance ministries. Vertical multi-level governance and the coordination of the large number of actors (multi-actor governance) must also be strengthened (Schneider, 2023). Various mechanisms in the public sector can support a socio-ecological transformation, such as the more intensive use of priority budgeting approaches (green budgeting, gender budgeting, SDG budgeting, etc.) and their integration, as well as a sustainable procurement policy[12]. In this context, the role model effect of the public sector is of great importance.

Beyond individual measures, but also beyond broader-based programmes, the ecologically sustainable welfare state must therefore be understood as a regulatory framework and conceived as an overarching guiding principle that must guide the actions of all political actors in a future-proof political system – being aware that a balanced mix of different approaches and instruments is required to manage the upcoming socio-ecological transformation. In terms of policy integration, the silo mentality in environmental and social policy must be overcome, especially as co-benefits can be achieved in many respects and a substantial equivalence of environmental and social policy objectives can sometimes be assumed. Following a mainstreaming approach, decisions must therefore always (also) be assessed in terms of the extent to which they contribute to ensuring that planetary boundaries[13] are not exceeded and social boundaries are not undercut. Moreover, the transformation of the traditional into an ecologically sustainable welfare state that also actively contributes to climate protection means shifting away from an understanding of the welfare state as a purely reactive safety net towards a more preventive, more investive and more transformative welfare state.

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[12] This ranges from the use of ecological materials in the construction of public infrastructure to the provision of organic meals in canteens/schools and can effectively support a more climate-friendly design of structures and measures in a number of social policy fields of action (such as health and care, family policy and childcare facilities in particular) (Schneider, 2023).

[13] Planetary boundaries are the Earth's ecological limits, which, if exceeded, jeopardise the stability of the ecosystem (Rockström et al., 2009; Steffen et al., 2015).

The guiding principle of an ecologically sustainable welfare state should not be seen as a competitor, but rather as a (sometimes synergetic) complement to existing mainstreaming principles. The compensation of disadvantages for discriminated and marginalised groups and the focus on anti-discrimination and gender equality to ensure social justice continue to be central core values of the ecologically sustainable welfare state. The analysis of the welfare state's fields of action makes clear that people who are already vulnerable (in the sense of having a predisposition to be harmed) are often disproportionately affected by both the consequences of climate change and the consequences of climate protection measures. Accordingly, steps towards a socio-ecological transformation that can effectively support these groups should be prioritised. When identifying vulnerabilities and designing the corresponding portfolio of measures, it is important to bear in mind that vulnerable groups are not static but can increase in size depending on the framework conditions. In this context – for budgetary reasons as well as from an environmental and climate policy perspective – the success of social policy should not be measured primarily by the level and growth of welfare state-motivated (especially monetary) benefits, but rather more by their results in terms of their contribution to satisfying individual and collective needs. This also requires greater consideration of the structures of welfare state benefits and – to varying degrees depending on the specific welfare state's field of action – a shift from cash benefits to comprehensive, high-quality services and benefits in kind and universal basic socio-ecological infrastructure.

Meeting the interdependencies of the economic, ecological and social challenges of a future-proof organisation of the welfare state requires adequate institutional, political and social framework conditions. In order to ensure democratic legitimacy and avoid conflicts of recognition, decision-makers in the ecologically sustainable welfare state must strive to gain acceptance from the population. Social equalisation in the form of improved access to education and better income opportunities as well as efforts to compensate for possible disadvantages caused by climate protection measures through appropriate social (political) measures and to avoid new inequalities (Aigner et al., 2023) is therefore not only an inherent objective of the welfare state, but also facilitates the implementation of socio-ecological measures at the macro level by improving conditions at the micro level (Schneider, 2023). For example, compensation measures to offset the negative distributional effects of carbon pricing measures increase public acceptance of climate protection measures (Köppl and Schratzenstaller, 2023).

To secure collective public acceptance of the ecologically sustainable welfare state as a binding framework, it is essential to formulate evidence-based political action, continuous evaluation and adjustment of the approach, and the active involvement of researchers and stakeholders. Additionally, establishing information campaigns and implementing awareness-raising initiatives will play a cru-

cial role in fostering broad support for this transformative model (Görg et al., 2023; Schneider, 2023). This requires not only data and forecasts on the (future) effects of climate change, but also regularly updated estimates of the costs of inadequate climate policy action for private households, companies and the state, as well as the benefits of climate protection measures for private households and the public sector. Moreover, the timely and ongoing provision of objective information and empirical evidence are key for building and increasing public acceptance, with political actors as well as science and the media playing an important role (Theine and Regen, 2023).

Acquiring external knowledge often feels unsatisfactory. Confronting planning proposals that seem to have no alternative can lead to frustration. This can trigger defensive reactions and resistance. Participation processes that are as accessible and open-ended as possible therefore seem essential. Participation on an equal footing and the inclusion of citizens' ideas can increase acceptance and offer the opportunity for social learning and the use of local knowledge to refine projects. Participation instruments (such as public hearings, regulars' tables, citizens' councils, planning cells, but also web-based discussions) not only serve to collectively form opinions and find solutions to complex problems, but also and above all to create shared, positive, possibly post-materialistic visions of the future.

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